

EXPRESS MAIL NO.: EV373446295US DATE DEPOSITED: 11/17/2004

US. Patent Application

Serial No.: 09/842,930

Title: HYALURONAN RECEPTOR FOR ENDOCYTOSIS

Inventor: Paul H. Weigel et al.

Group: 1647

Filed: April 25, 2001

Agent: Kathryn L. Hester, Ph.D.

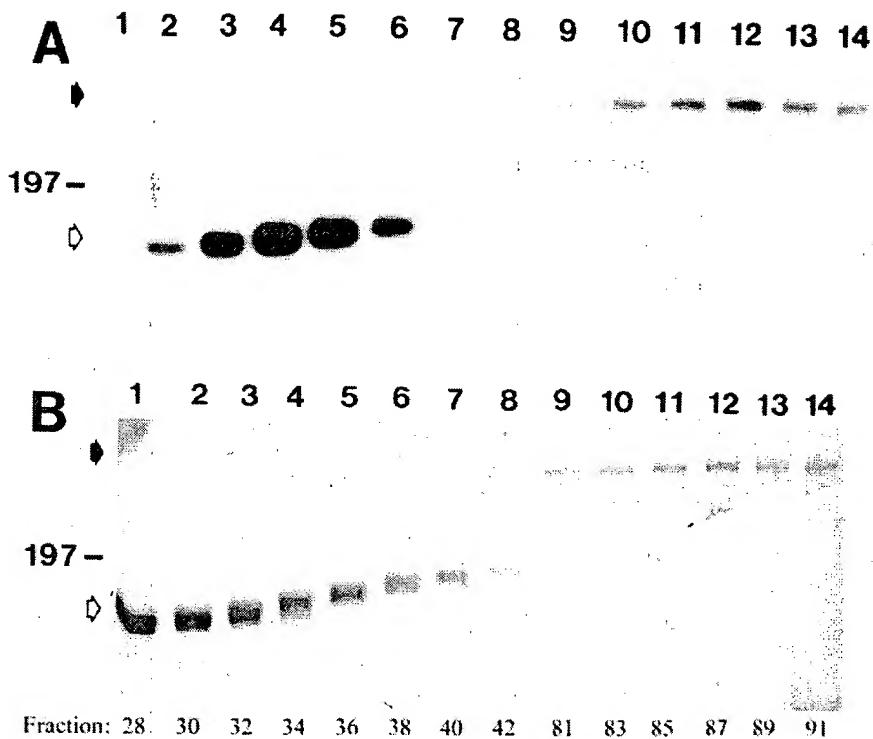
Examiner: L. Spector

Docket No. 5820.603

SHEET 1 OF 42 FORMAL DRAWINGS



# Figure 1

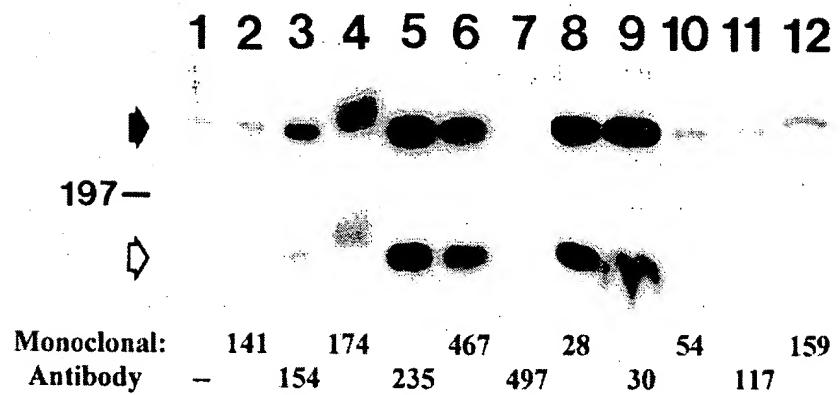


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SHEET 2 OF 42 FORMAL DRAWINGS



## Figure 2

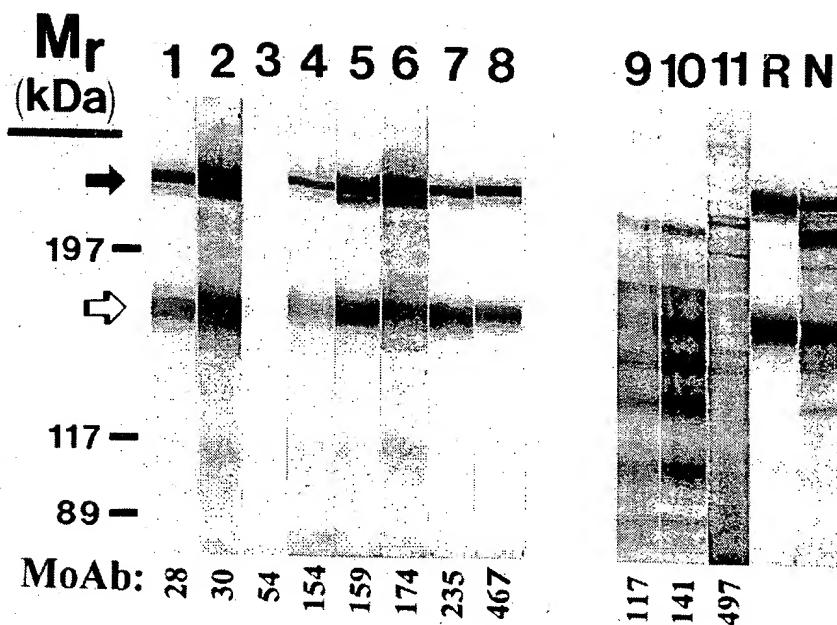


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Group: 1647  
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## FORMAL DRAWINGS

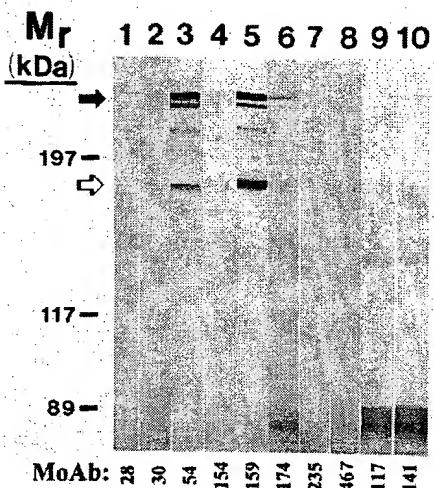
# Figure 3



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# Figure 4

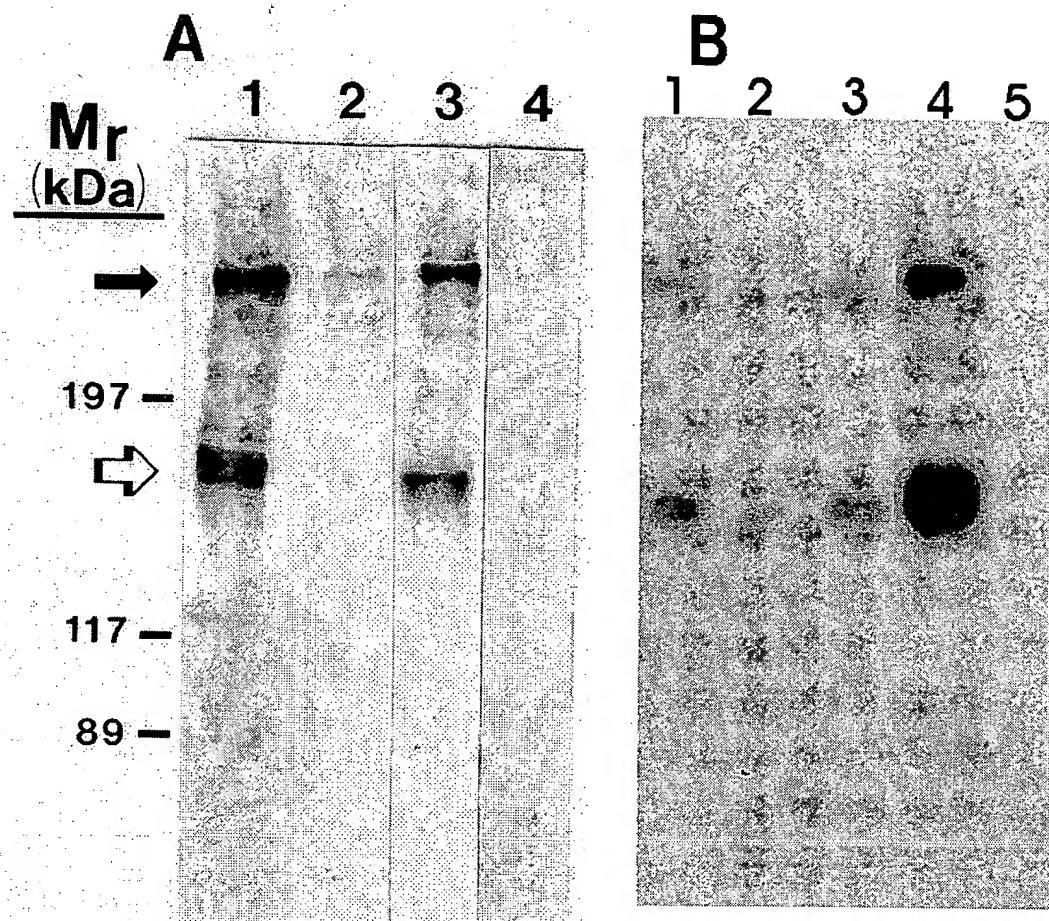


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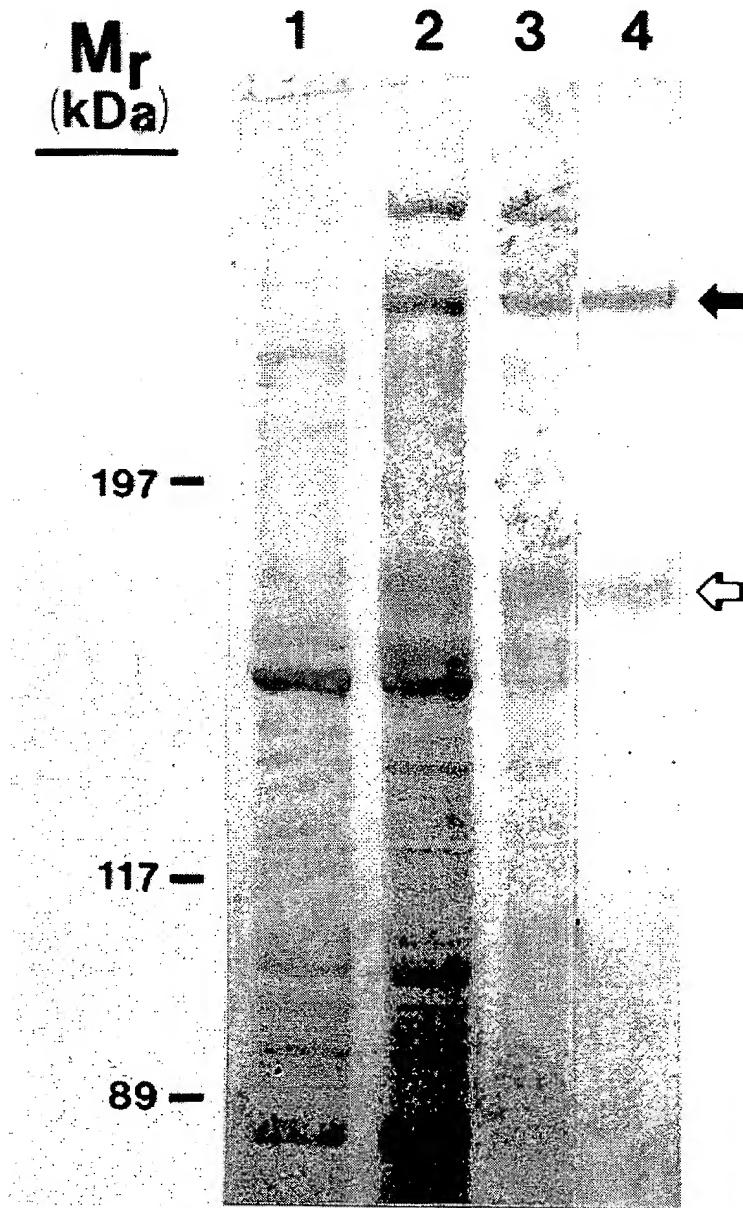


# Figure 5





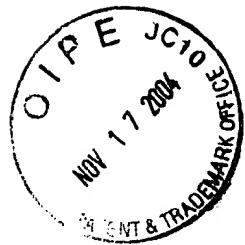
# Figure 6



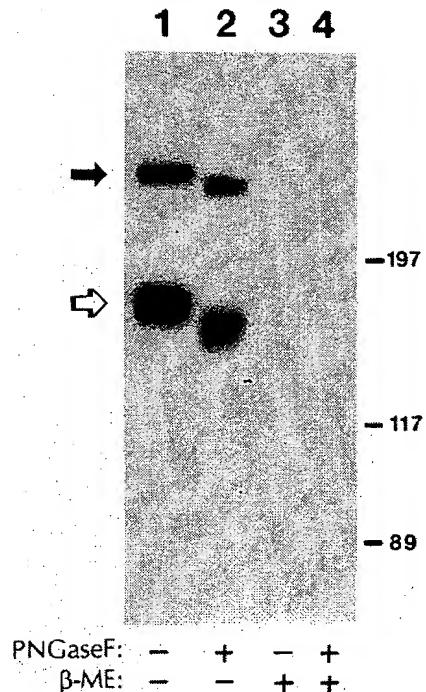
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## FORMAL DRAWINGS

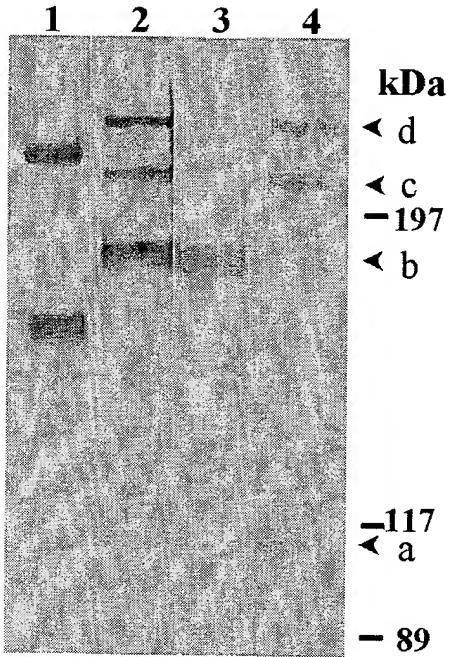


# Figure 7



# Figure 8

**A**

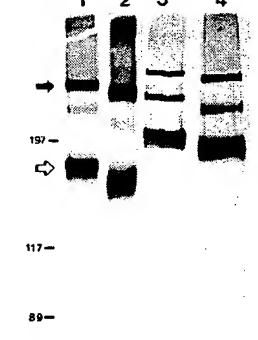


kDa

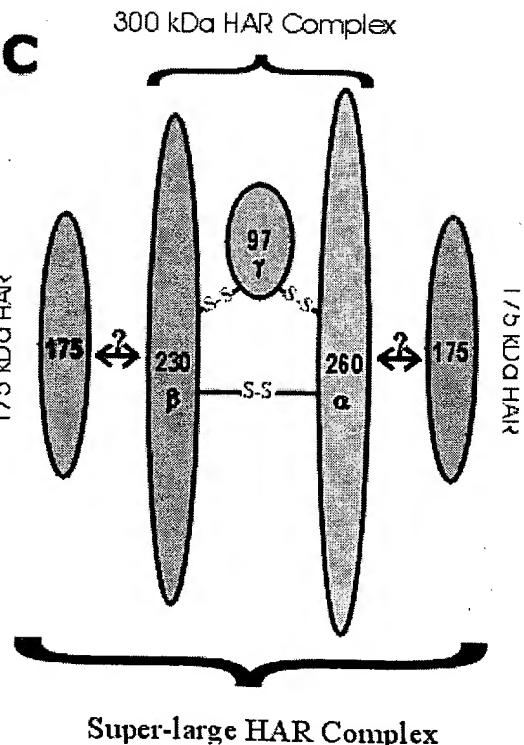
◀ d  
 ▲ c  
 - 197  
 ▼ b

- 117  
 ▲ a  
 - 89

**B**



PNgaseF: -      ++  
 beta-ME: -      + +



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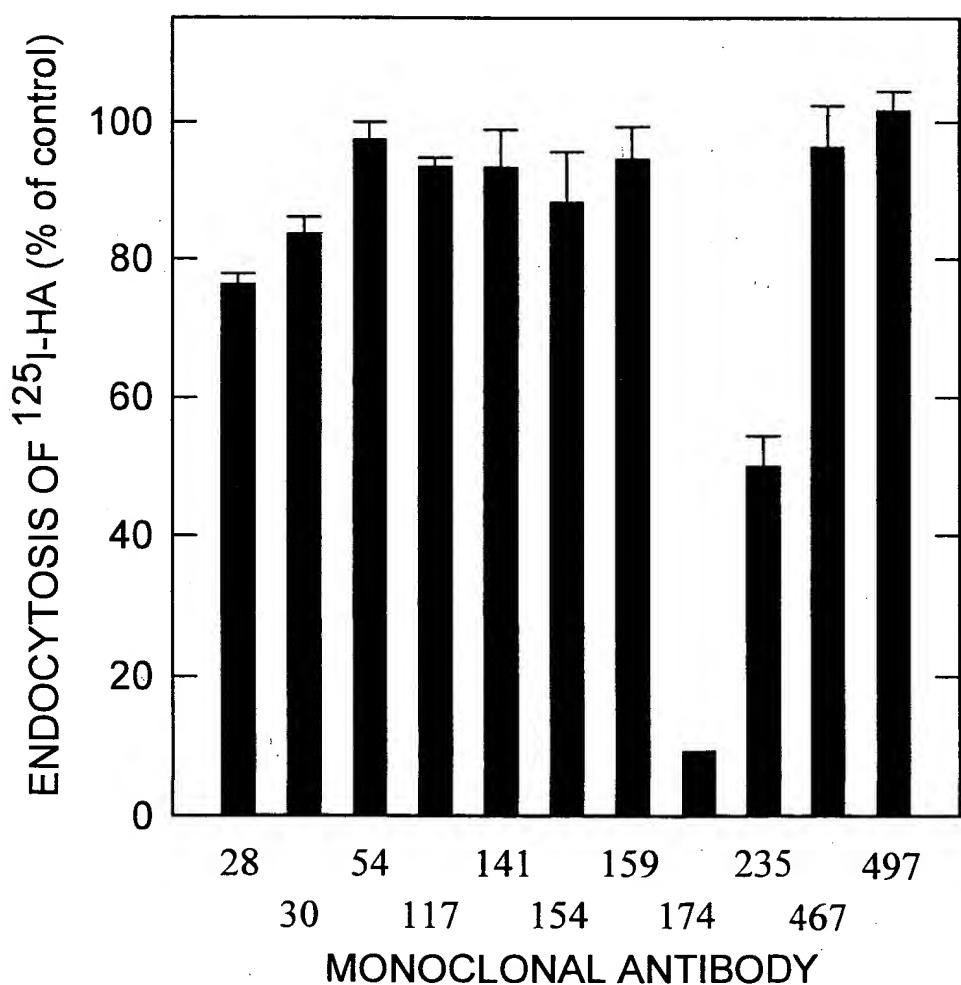
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**Figure 9**

U.S. Patent Application

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Group: 1647

Title:

Inventor:

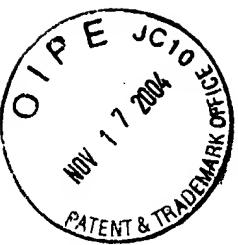
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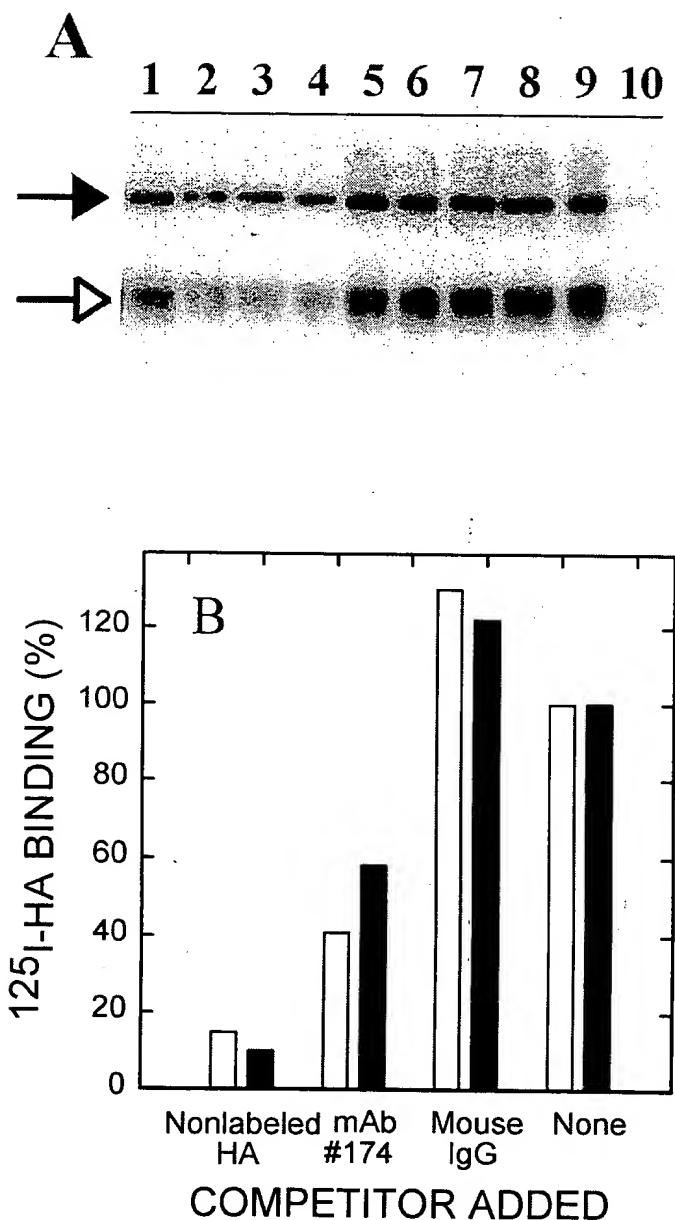
Docket No.:

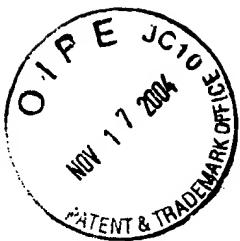
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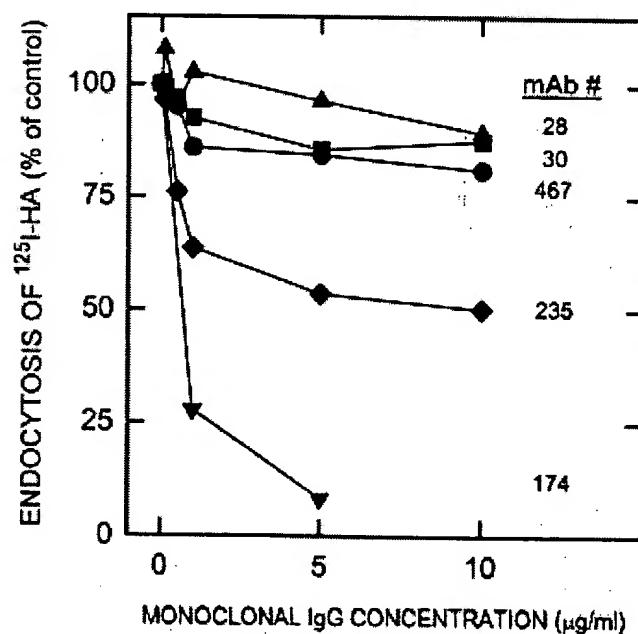
# Figure 10

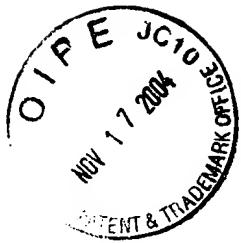




# Figure 11

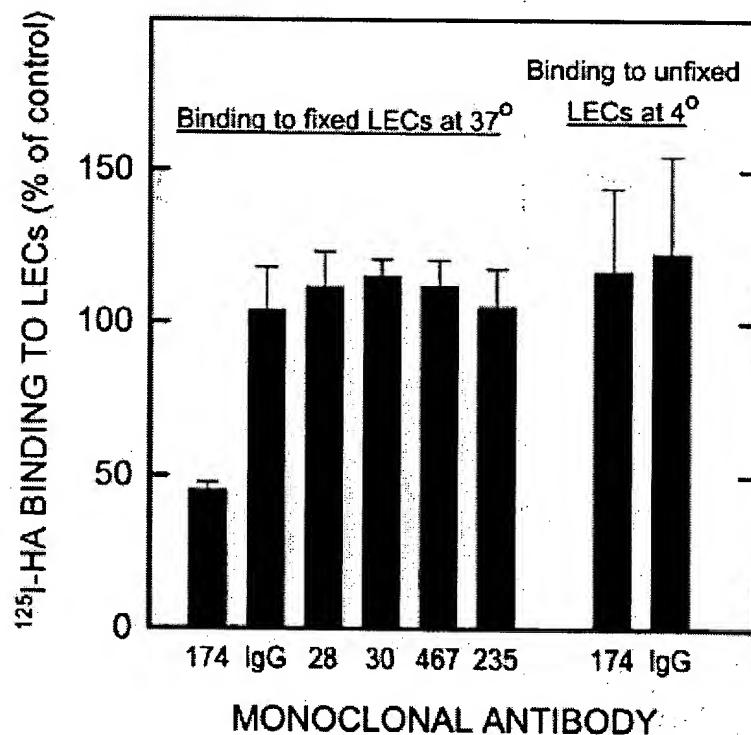
## Antibody Inhibition of HA Endocytosis by HARE in LECs





# Figure 12

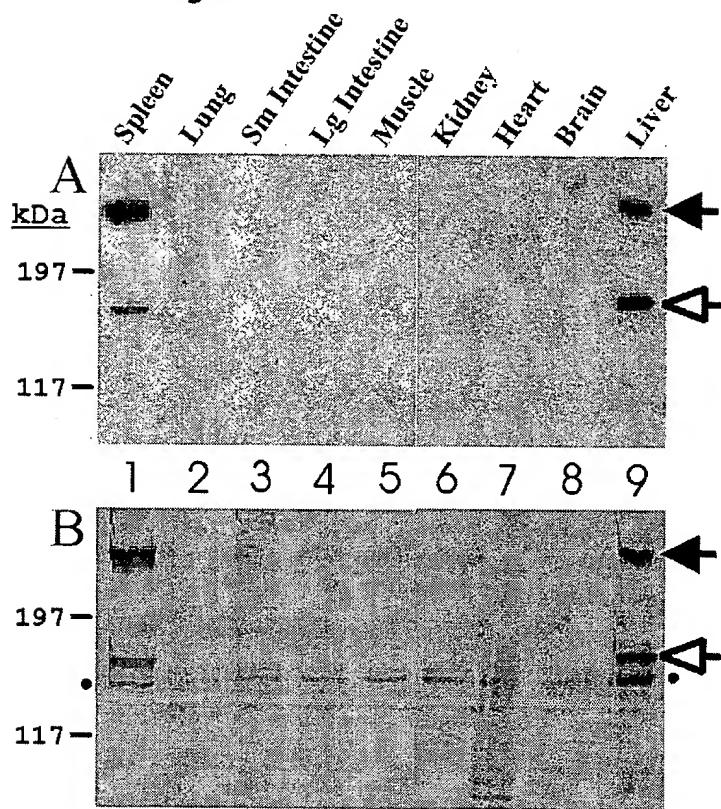
## Antibody Inhibition of HA Binding to HARE on LECs is Temperature Dependent

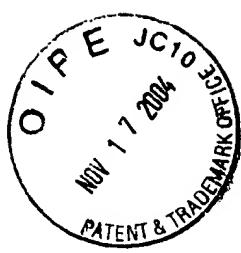




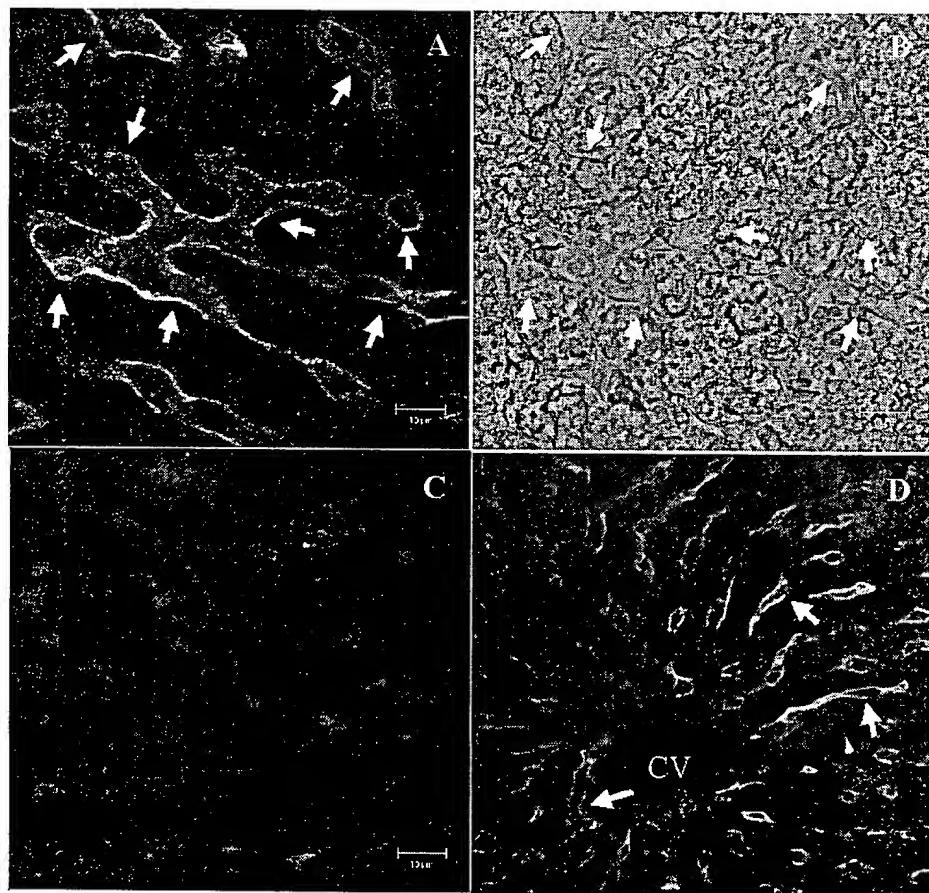
# Figure 13

Figure 13





# Figure 14



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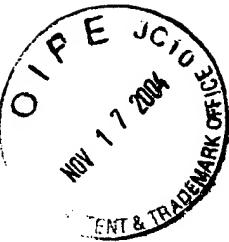
Kathryn L. Hester, Ph.D.

Examiner: L. Spector

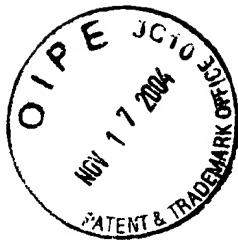
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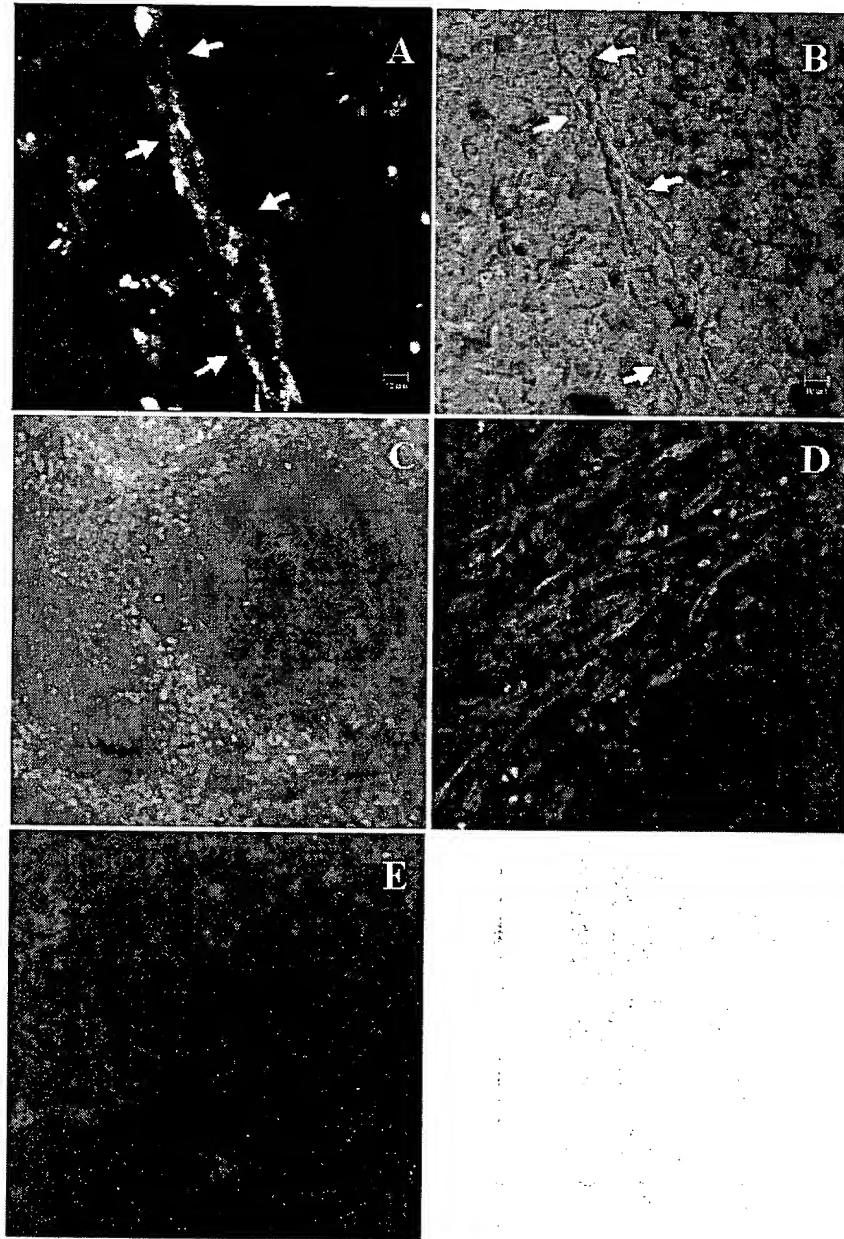
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# Figure 15



# Figure 16



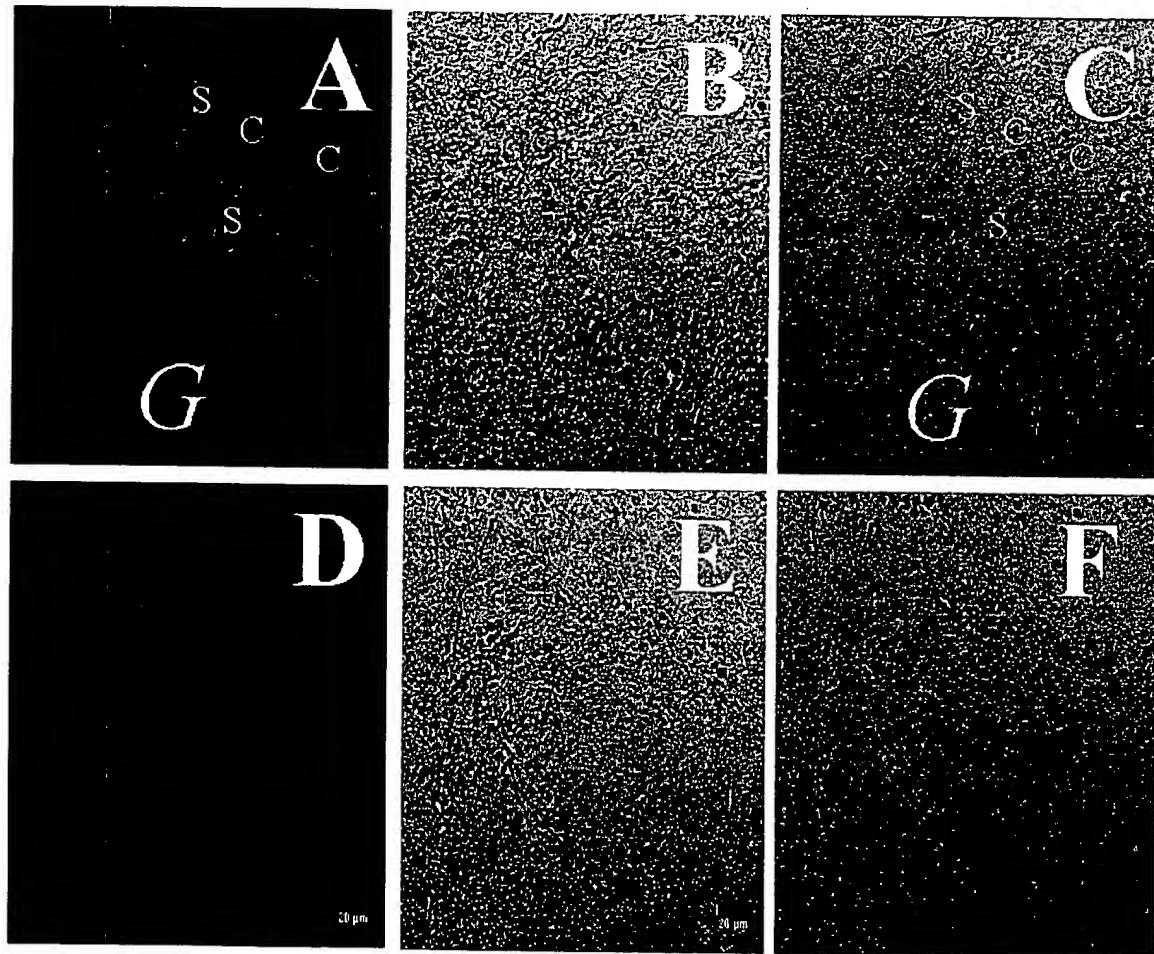
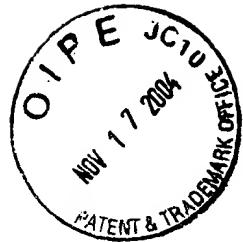


Figure 17

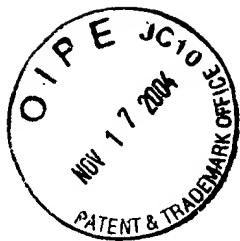
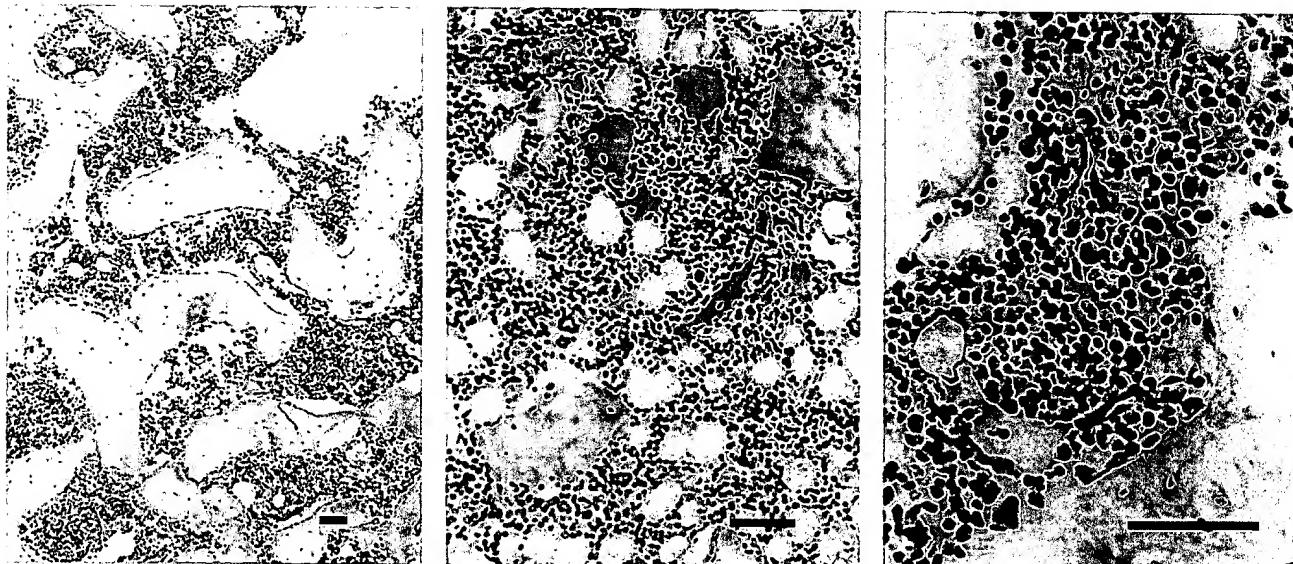


Figure 18

## Immunolocalization of HARE in Bone Marrow

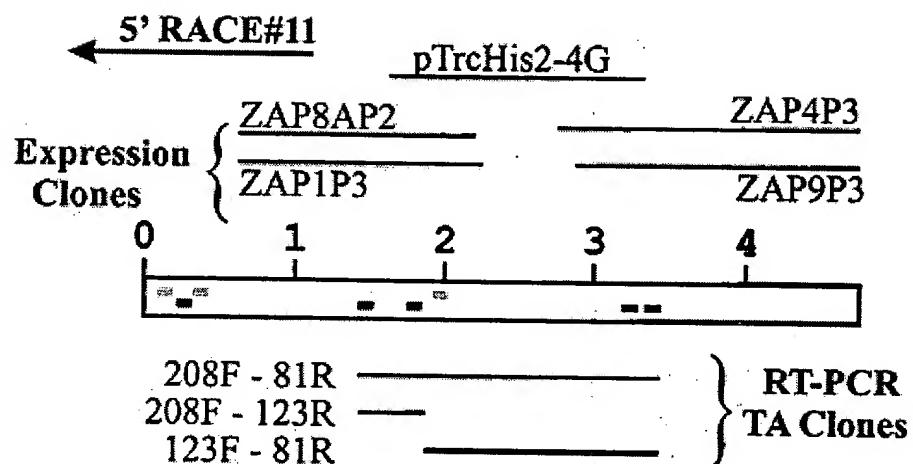
Control



Bars = 50 um



# Figure 19



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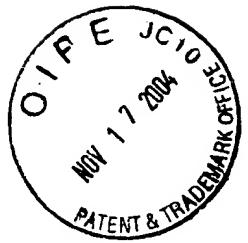
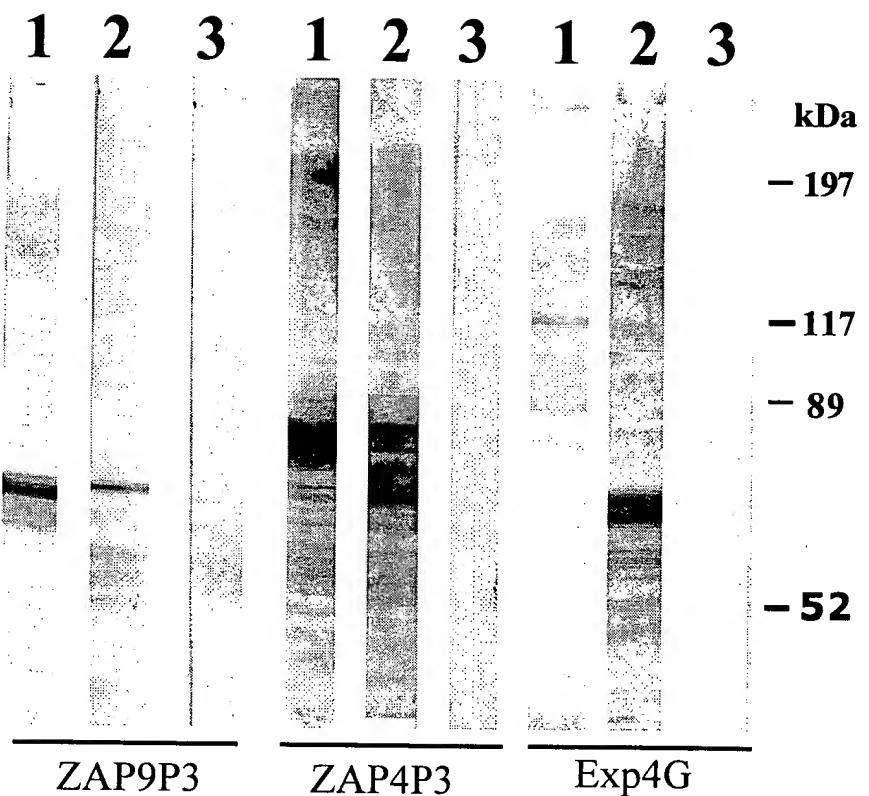
Group: 1647

Agent: Kathryn L. Hester, Ph.D.

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Figure 20





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**Figure 21**

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Filed:

April 25, 2001

Agent:

Kathryn L. Hester, Ph.D.

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Figure 22

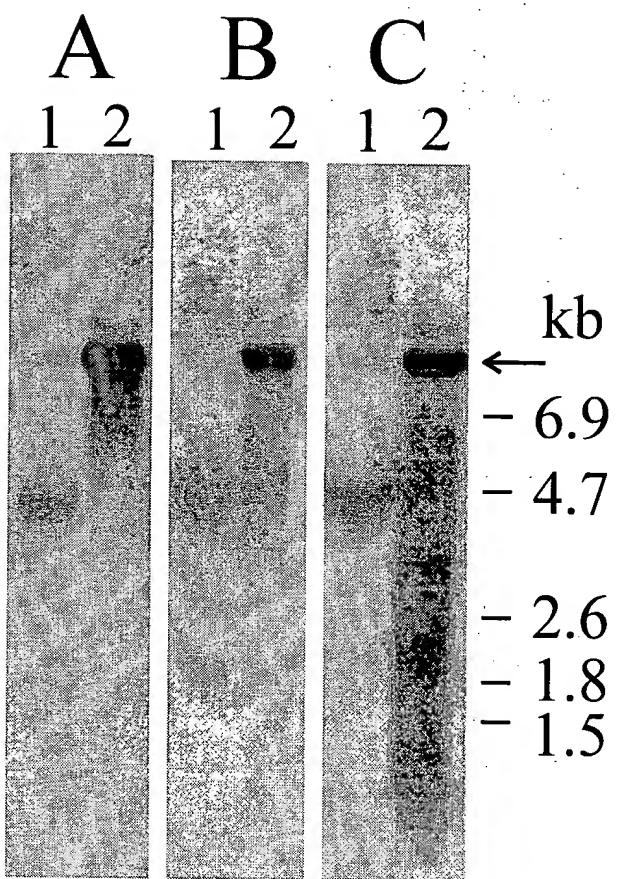
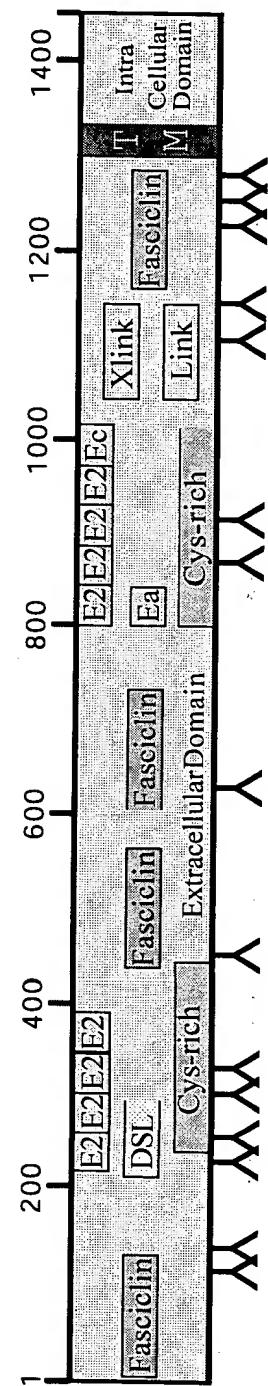
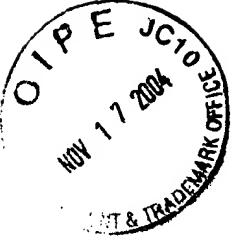
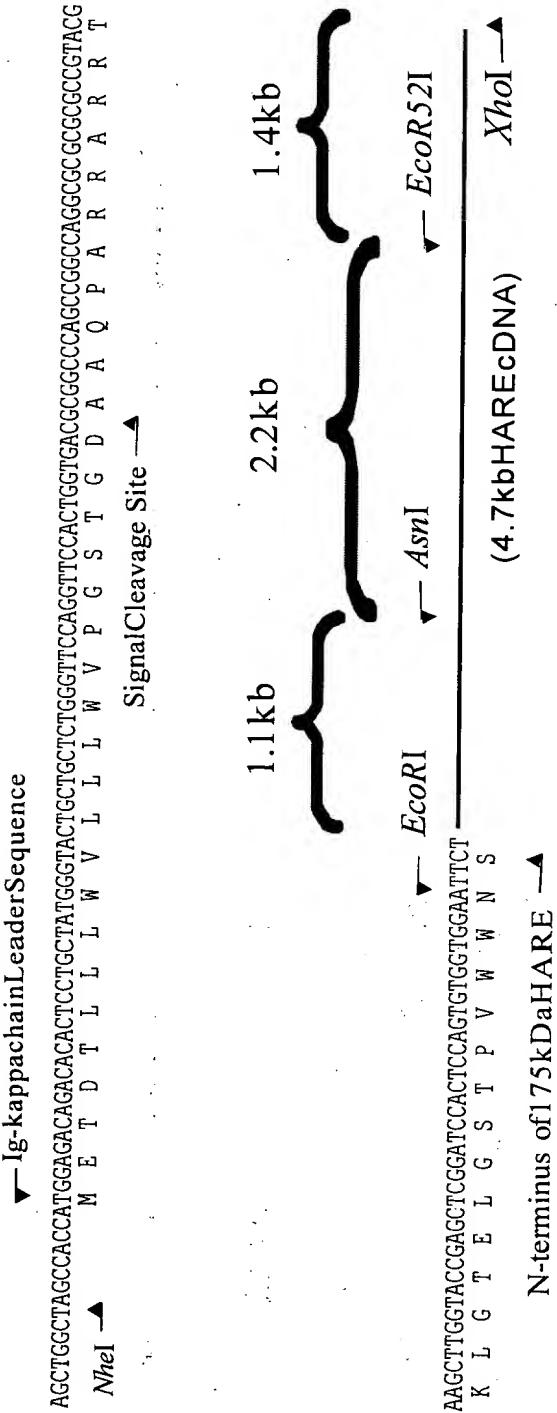




Figure 23



**Figure 24**



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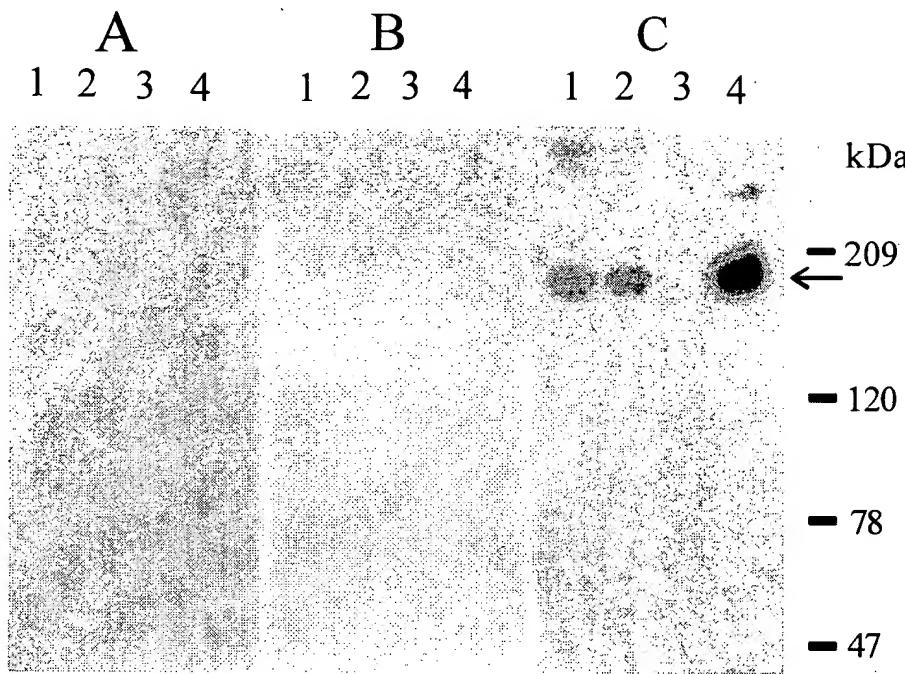
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Docket No. 5820.603

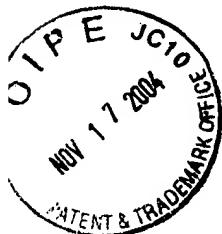
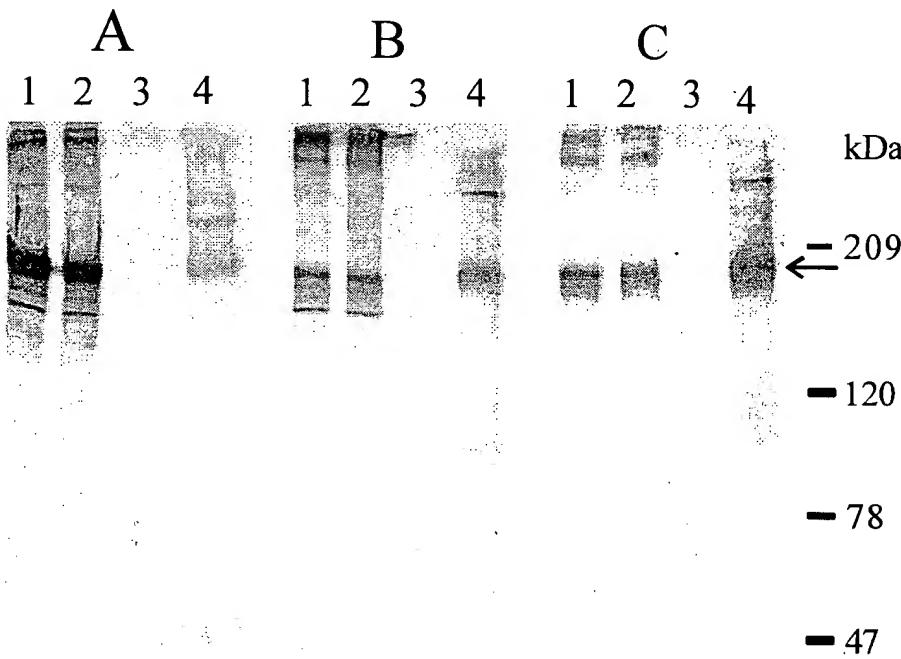
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**Figure 25**

## Autoradiography



## Western Blot



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Examiner: L. Spector

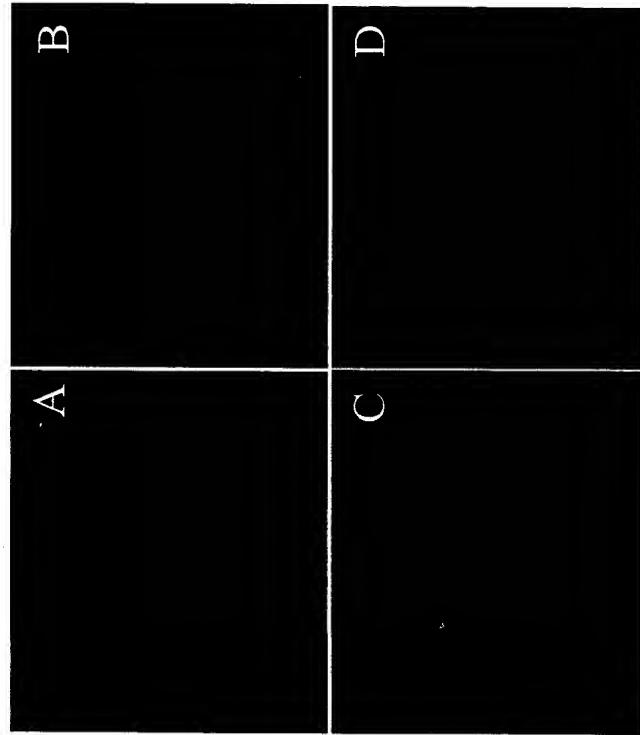
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Figure 26



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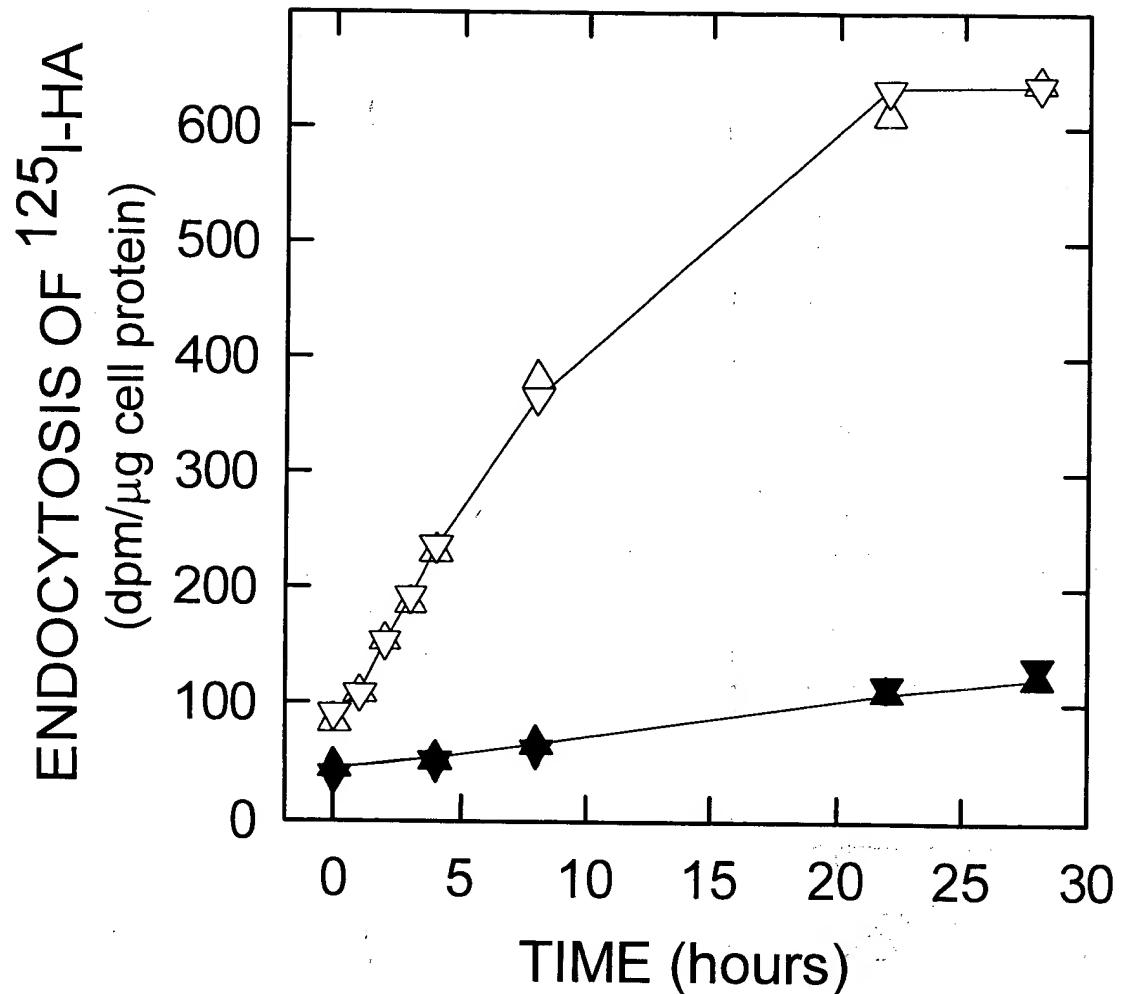
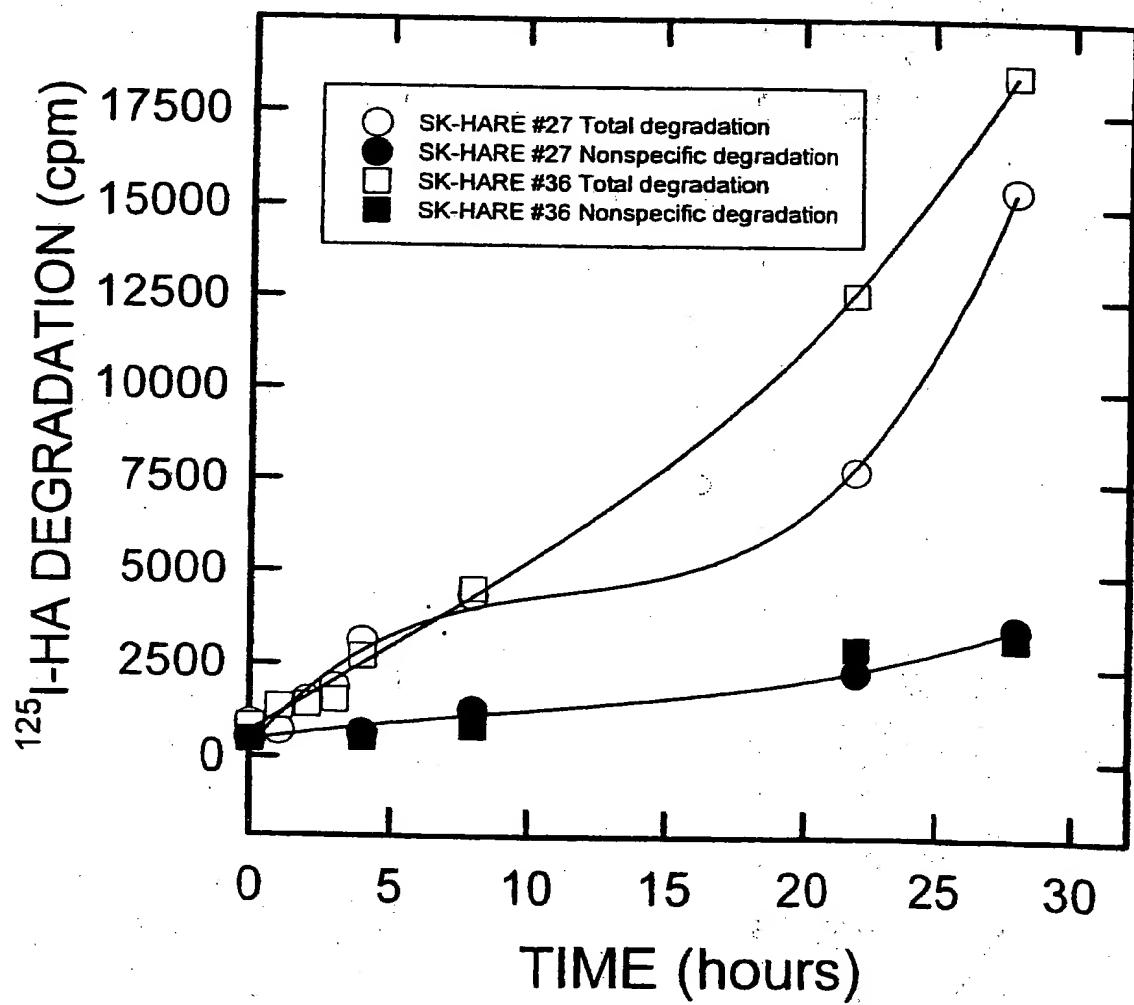


Figure 27A

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Figure 27B

Degradation of internalized HA by transfected SK-Hep1 cell lines expressing the 175-kDa HARE



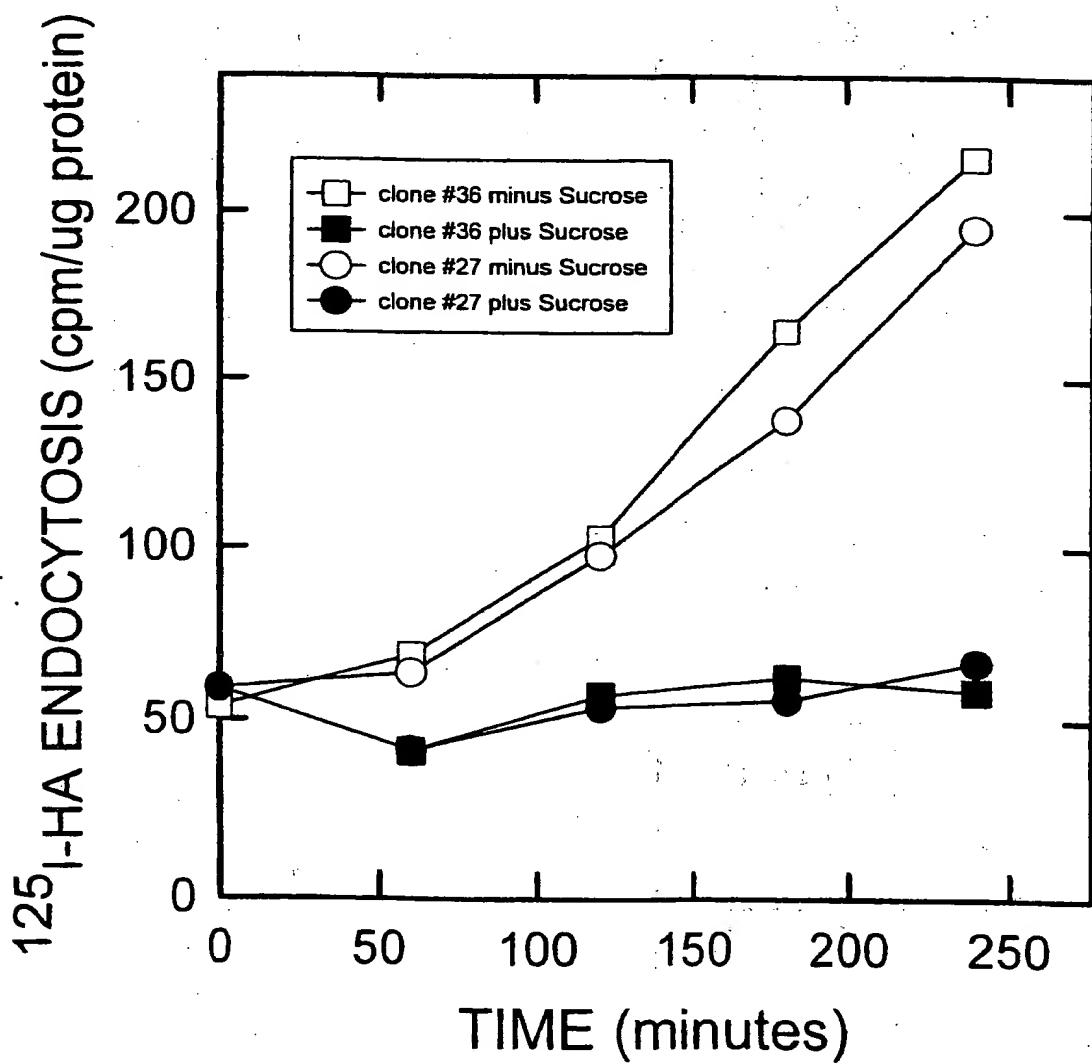
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Figure 27C

## Hyperosmolarity inhibits HA endocytosis mediated by HARE in transfected SK-Hep1 cells



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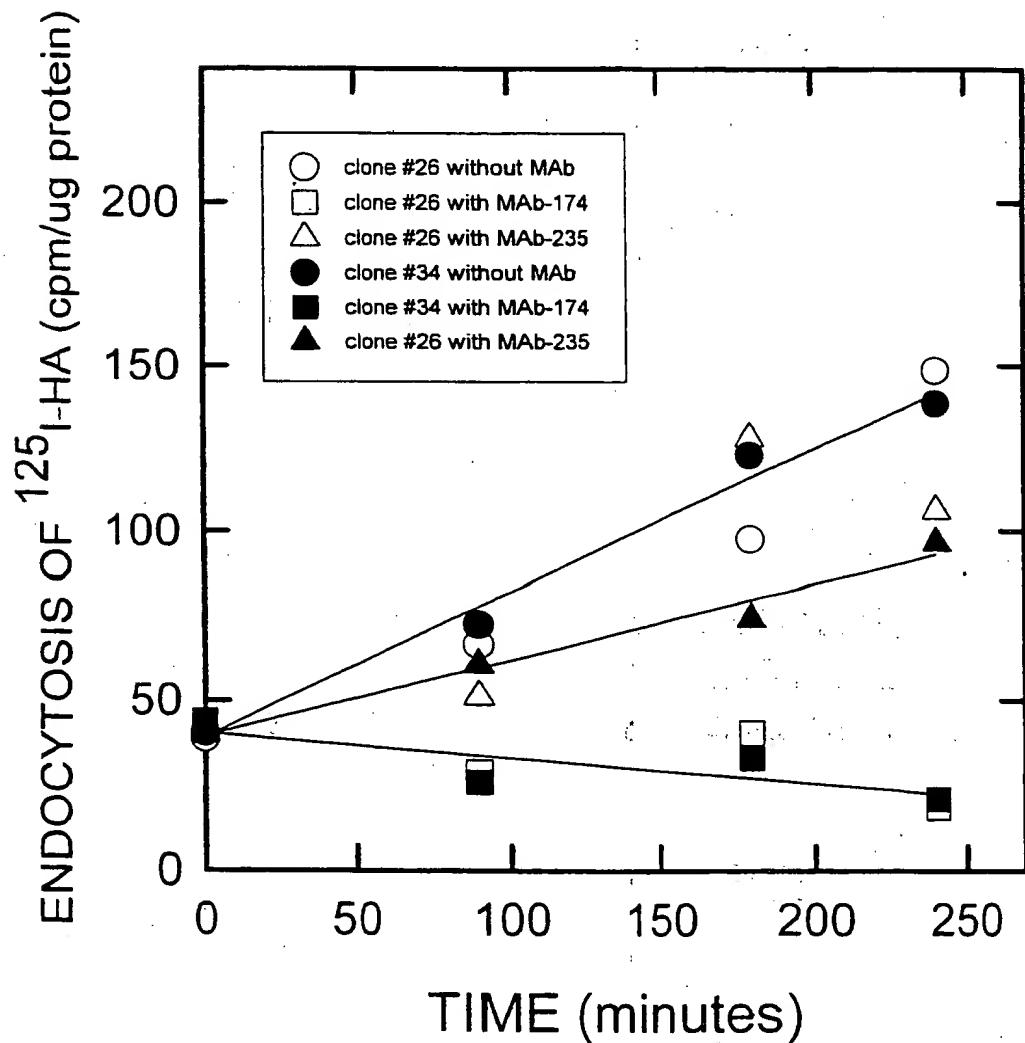
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Figure 27D

**Specific monoclonal antibodies against HARE inhibit HA endocytosis in SK-Hep1 transfectants expressing the 175-kDa HARE**



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Figure 28

17SHARE 1 ----- S1ES LLTRLEQMPD YSIIFRGYI IH YN LASAIESA DAYTVFVPTN EAIIENYIREK KATS LKED IL RYHVVGEKL LKNNDIHNGMH RETMLGFSYL  
CAB61827 1111 LHLSQVLIP PRGDVPGQQ LLQQLDLVPA FSLFRELLQH HG LVPQIEAA TAYTIFVPTN RSLEA-- QG NSSHLOADTV RHRHVGEAL SMETLRKGH RNSSLGPWHR  
BAA13377 754 LHLSQVLIP PRGDVPGQQ LLQQLDLV-A FSLFRELLQH HG LVPQIEAA TAYTIFVPTN RSLEA-- QG NSSHLOADTV RHRHVGEAL SMETLRKGH RNSSLGPWHR

17SHARE 95 LAFTLRLNDQL YVNEAPINY NTYATDKVVIH GLEKVLEIQK NRDNNDITII VGRGEGMSQ QAEPLLETKP BRETAKR IY SIYPMGRSV FIGOPVVR TILTROWLA  
CAB61827 1218 IVFYNHSQCP EVNHVPLLEG MLEAPGRSLI GLSGVLTVG SRELHSHEAA LREKVNMTK RFTGTQFQL QDTPRKSVY RSGFSFSR-- GSYTAK KIQVPIECPG  
BAA13377 861 IVFYNHSQCP EVNHVPLLEG MLEAPGRSLI GLSGVLTVG SRELHSHEAA LREKVNMTK RFTGTQFQL QDTPRKSVY RSGFSFSR-- GSYTAK KIQVPIECPG

17SHARE 204 SLAENAKPAP GEVK-MALG TASWDGVNG TGTGGLGF NGTAETTE GRYGIIHDQA CSVHGRSQ GPLGDGSID DVGWRGVHD MEITTDDNG TEHTSANLL  
BAB15793 1 ----- W HLFGWS-- DG TVGCEGECF SGTAETTE GRYGIIHDQA CSVHGRSQ GPLGDGSID DVGWRGVHD NATTEDNG TEHTSANLL  
CAB61358 1 -----  
CAB61827 1224 FFGTLCPCP GGLGGVSS-G HGQCQDRFLG SGECHHEGF HGTAEVTEL GRYGPNTGV SUGAHGICQE GLQGDGSIV NVGWQGLRD QKITSPOPR KDPNAMVQ  
BAA13377 967 FFGTLCPCP GGLGGVSS-G HGQCQDRFLG SGECHHEGF HGTAEVTEL GRYGPNTGV SUGAHGICQE GLQGDGSIV NVGWQGLRD QKITSPOPR KDPNAMVQ

17SHARE 313 DPDGKASINE AAGFRGNGTV STAINAESI NGGISTKA KRTPGPNRV V TAGYTGDD IVLEINPL ENHGODDNA EPTQGPNQA VNG LPKTTG DG-KVTLIN  
BAB15793 90 NSDTGASINE AAGFQGNTI STAINAESI NGGISTKA KRTPGPNRV V TAGYTGDD IVLEINPL ENHGODDNA EPTQGPNQA AEMLPATTG DG-KVTLIN  
CAB61358 3 EAVGTASEINE AAGFQGNTI STAINAESI NGGISTKA KRTPGPNRV V TAGYTGDD IVLEINPL ENHGODDNA EPTQGPNQA AEMLPATTG DG-KVTLIN  
CAB61827 1433 DSAGASTAS AAGYSGNCIF SSEVDPEAHG HGGSPHAN TKVAPGQRT TQDGYGMDD ELQOEINSL IHHGCHIBA EPIFPGQOV SSGREGYSG DGIRTTELLD  
BAA13377 1076 DSAGASTAS AAGYSGNCIF SSEVDPEAHG HGGSPHAN TKVAPGQRT TQDGYGMDD ELQOEINSL IHHGCHIBA EPIFPGQOV SSGREGYSG DGIRTTELLD

17SHARE 422 VELTKNNNGS PFAFENYTEQ DQRITTEKPD Y-TGDDGIVR GSIYGELPKN PSTSQYFFQL QEHAVRELAG PGPFPTVFAP-- LSSSFNRH PRKWDWDQG LMSQVLRYHV  
BAB15793 199 VELTKNNNGS PFAFENHETQ VERTTCKPN Y-IGDGFTT GSIYQELPKN PKTSQYFFQL QEHFVKDLVG PGPFPTVFAP-- LSSAFDEE ARVKWDWRYG LMSQVLRYHV  
CAB61358 112 VELTKNNNGS PFAFENHETQ VERTTCKPN Y-IGDGFTT GSIYQELPKN PKTSQYFFQL QEHFVKDLVG PGPFPTVFAP-- LSSAFDEE ARVKWDWRYG LMSQVLRYHV  
AAF82398 1 -----  
CAB61827 1543 PLSKNNNGS PYATEKSTGD GQTITEHTDA HTVGDGLTR ARVGELELLRD KHAS--FFSL RLLEYKELKG DGPTFTFVPH ADMSNLSQD ELARIRAHHQ --MPQVLRYHV  
BAA13377 1186 PLSKNNNGS PYATEKSTGD GQTITEHTDA HTVGDGLTR ARVGELELLRD KHAS--FFSL RLLEYKELKG DGPTFTFVPH ADMSNLSQD ELARIRAHHQ L--VFRYHV

17SHARE 528 VGDQLLLDN LKVTTSAATL QGEPVTSIVS QDTVFINNEA KVLSDDIIST NGVHVIDKL LSPKNLLITP KDALGRVLQ LTTVAANHGY TKFSLIQDS GLLSVITDSI  
BAB15793 305 VAHQLLLEN LKLISNATL QGEPVIVSIS QSTVYINNA KIISSDIIST NGVHVIDKL LSPKNLLITP KDNNSRILQ LTTLATNNGY IKFSNLQDS GLLSVITDPI  
CAB61358 218 VAHQOLLLEN LKLISNATL QGEPVIVSIS QSTVYINNA KIISSDIIST NGVHVIDKL LSPRNLLITP KDNNSRILQ LTTLATNNGY IKFSNLQDS GLLSVITDPI  
AAF82398 10 VAHQOLLLEN LKLISNATL QGEPVIVSIS QSTVYINNA KIISSDIIST NGVHVIDKL LSPRNLLITP KDNNSRILQ LTTLATNNGY IKFSNLQDS GLLSVITDPI  
CAB61827 1646 VGDARRLSED LLEQGYATAL SGEPLRFSR EGSIYLNDA RVVSSDHEAV NGILEHIDRV LLPEALEWE PDDAPIPRN VTAAAQGFGY KIFSGL LKVA GLLPLIREAS  
BAA13377 1291 VGDARRLSED LLEQGYATAL SGEPLRFSR EGSIYLNDA RVVSSDHEAV NGILEHIDRV LLPEALEWE PDDAPIPRN VTAAAQGFGY KIFSGL LKVA GLLPLIREAS

17SHARE 638 HTPVTFWPTP DKALEARLPE QDQFLFNQDN KDKLKSYLFK HVIRDASKALA SDLPRASAWK TLOGSELVR CTGSDIGL FLINEQAFRI HRGLLFDWGV AYGIDELLIM  
BAB15793 415 HTPVTFWPTP DQALHALPE QDQFLFNQDN KDKLKEYLFK HVIRDARVIA VDLPSTS TAWK TLOGSELVR CAGRDIGL FLNGQTRIV QRELLFDLGV AYGIDELLID  
CAB61358 328 HTPVTFWPTP DQALHALPE QDQFLFNQDN KDKLKEYLFK HVIRDARVIA VDLPSTS TAWK TLOGSELVR CAGRDIGL FLNGQTRIV QRELLFDLGV AYGIDELLID  
AAF82398 120 HTPVTFWPTP DQALHALPE QDQFLFNQDN KDKLKEYLFK HVIRDARVIA VDLPSTS TAWK TLOGSELVR CAGRDIGL FLNGQTRIV QRELLFDLGV AYGIDELLID  
CAB61827 1758 HRPFTMLWP DAAFRALPPD RQAWLYHEDH ROKLAAILRG SMIIRVEALA SDLPNLGPLR TMGTPISES CAGRDIGL FLNGQTRIV QRELLFDLGV AYGIDELLID  
BAA13377 1401 HRPFTMLWP DAAFRALPPD RQAWLYHEDH ROKLAAILRG SMIIRVEALA SDLPNLGPLR TMGTPISES CAGRDIGL FLNGQTRIV QRELLFDLGV AYGIDELLID

17SHARE 748 PTLGGRADTF TTFDIP-GEI GSLEFTPKP LKS PKPG VKF R-----IY-----NPLP R-----R-----RNVE-G QNLTUVVIQ PRSEGYMP DQAPPGPD  
BAB15793 525 PTLGGRADTF TTFDAS-GEI GSVNTPS-P RWS PKPG VRQ R-----IY-----NPLP K-----R-----RNLE-G RENSLVIOI PRSEGYGR DQAPPGPD  
CAB61358 438 PTLGGRADTF TTFDAS-GEI GSVNTPS-P RWS PKPG VRQ R-----IY-----NPLP K-----R-----RNLE-G RENSLVIOI PRSEGYGR DQAPPGPD  
AAF82398 230 PTLGGRADTF TTFDAS-GEI GSVNTPS-P RWS PKPG VRQ R-----IY-----NPLP K-----R-----RNLE-G RENSLVIOI PRSEGYGR DQAPPGPD  
CAB61827 1867 PG LGARADHF ETRPLRLNT SICCLEPP-P EG S QEQGSPE AWRFYPKFW TSPPHLHSGL RSVVWHPSLW GRPQGLGRG HRNVTITTWK PSVPGHYGS DQAPPGPS  
BAA13377 1510 PG LGARADHF ETRPLRLNT SICCLEPP-P EG S QEQGSPE AWRFYPKFW TSPPHLHSGL RSVVWHPSLW GRPQGLGRG HRNVTITTWK PSVPGHYGS DQAPPGPS

17SHARE 833 TPGNRRGMR DLVTFMGGQI LHTGFNGTAA EIWHRGFCP DQPRPSISHE GNDDEGITGS GELI ETGWT AAS DPTPTAV FAVITPA SV HATRENNNT VENLNJEGDG  
BAB15793 609 APNRRGMR DQYSATGEK EIWTFNGTAA EIWPGRCGP DLPCCSISDH GNDDEGITGS GOLI ETGWT GPSDQTAVL PAVITPP SA HATRENNNT ENLQDYEVDG  
CAB61358 522 APNRRGMR DQYSATGEK EIWTFNGTAA EIWPGRCGP DLPCCSISDH GNDDEGITGS GOLI ETGWT GPSDQTAVL PAVITPP SA HATRENNNT ENLQDYEVDG  
AAF82398 314 APNRRGMR DQYSATGEK EIWTFNGTAA EIWPGRCGP DLPCCSISDH GNDDEGITGS GOLI ETGWT GPSDQTAVL PAVITPP SA HATRENNNT ENLQDYEVDG  
CAB61827 1977 SPEDRGMV DGMGSSGQI ERSGFACTA EIWAPGAFGP HZQACRIVH GNDDELGGS GOLI DEGWT GPRGEVQEL QPVITPP AP EAVIAGNS DLSIG YEGDG  
BAA13377 1620 SPEDRGMV DGMGSSGQI ERSGFACTA EIWAPGAFGP HZQACRIVH GNDDELGGS GOLI DEGWT GPRGEVQEL QPVITPP AP EAVIAGNS DLSIG YEGDG

17SHARE 943 ITETVVDERK QNNGCGAKVA RISQKGTQVS SISQKGTQGD GSYIEIDP ADGVNGCIE HATRMTGPG KHEKIKSHY VGDGV--EP EQLPIDRLO DNGCIEHDAS  
BAB15793 719 ITETVVDERK QDNGCGAKVA RISQKGTQVS SISQKGTQGD GHSTTEIDP ADGLNGCIE HATKMTGPG KHEKIKSHY VGDGLN--EP EQLPIDRLO DNGCIEHADAK  
CAB61358 632 ITETVVDERK QDNGCGAKVA RISQKGTQVS SISQKGTQGD GHSTTEIDP ADGLNGCIE HATKMTGPG KHEKIKSHY VGDGLN--EP EQLPIDRLO DNGCIEHADAK  
AAF82398 424 ITETVVDERK QDNGCGAKVA RISQKGTQVS SISQKGTQGD GHSTTEIDP ADGLNGCIE HATKMTGPG KHEKIKSHY VGDGLN--EP EQLPIDRLO DNGCIEHADAK  
CAB61827 2087 RVEVADLQ DGHGCGSEHA MSQVGTMT LPDYPEDG GWSVBARNP TDGHRCGSE HANGLSTGLN TRPHEHAGY VGDGLN--EE SEPPDVRLG QPPHEISDM  
BAA13377 1730 RVEVADLQ DGHGCGSEHA MSQVGTMT LPDYPEDG GWSVBARNP TDGHRCGSE HANGLSTGLN TRPHEHAGY VGDGLN--EE SEPPDVRLG QPPHEISDM

17SHARE 1052 RABLYFQDTT VGVFHLRSP LQYKLTDFKA KEAFAKEAT IATYNQLSYA QKAKYHISA GWLESGRVY PITTYASQK ANVVGIVDYG SRANKSEMWD VENYRMKDVN  
BAB15793 828 RABLYFQDTT VGVFHLRSP LQYKLTDFKA KEAFAKEAT IATYNQLSYA QKAKYHISA GWLESGRVY PTAFASONG SGVVGVIVDYG PRPNKSEMWD VENYRMKDVN  
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AAF82398 533 RABLYFQDTT VGVFHLRSP LQYKLTDFKA KEAFAKEAT IATYNQLSYA QKAKYHISA GWLESGRVY PTAFASONG SGVVGVIVDYG PRPNKSEMWD VENYRMKDVN  
CAB61827 2197 RABLYFQDTT AGVFHLQATS GPYLGNLNSEA EAQAGAV LASFPQLSA QLQGHFIM GWLANGSTA PVFVVAQD NGRVGVVSLG ARENISERW AYTRVQDVA  
BAA13377 1840 RABLYFQDTT AGVFHLQATS GPYLGNLNSEA EAQAGAV LASFPQLSA QLQGHFIM GWLANGSTA PVFVVAQD NGRVGVVSLG ARENISERW AYTRVQDVA

17SHARE 1162 RABLYFQDTT VGVFHLRSP LQYKLTDFKA KEAFAKEAT IATYNQLSYA QKAKYHISA GWLESGRVY PITTYASQK ANVVGIVDYG SRANKSEMWD VENYRMKDVN  
BAB15793 938 RABLYFQDTT VGVFHLRSP LQYKLTDFKA KEAFAKEAT IATYNQLSYA QKAKYHISA GWLESGRVY PITTYASQK ANVVGIVDYG SRANKSEMWD VENYRMKDVN  
CAB61358 849 RABLYFQDTT VGVFHLRSP LQYKLTDFKA KEAFAKEAT IATYNQLSYA QKAKYHISA GWLESGRVY PITTYASQK ANVVGIVDYG SRANKSEMWD VENYRMKDVN  
AAF82398 643 RABLYFQDTT VGVFHLRSP LQYKLTDFKA KEAFAKEAT IATYNQLSYA QKAKYHISA GWLESGRVY PITTYASQK ANVVGIVDYG SRANKSEMWD VENYRMKDVN  
CAB61827 2307 RABLYFQDTT GISTENGKLL DVAIATANFS TFYGMILGYA NATQRGLDFL DFLLDDELTYK TLFPVNEEF VDNMTLSPD LELEASNATL LSAN-ASQGK LLPAHGSL  
BAA13377 1950 RABLYFQDTT GISTENGKLL DVAIATANFS TFYGMILGYA NATQRGLDFL DFLLDDELTYK TLFPVNEEF VDNMTLSPD LELEASNATL LSAN-ASQGK LLPAHGSL

17SHARE 1271 LIITFS--QD QIHQ-ETRFV DGRSILQWDI IAANGILHII SEPLRAPPTA ATA--AHSG LGTGIICAVV LVTGAIA-L AMTSYFRNQ RTTG--FOE DQKRTIMSWL  
BAB15793 1047 LIITFS--QD PLQPTETRFV DGRAILQWDI FASNGIILHII SRPLKAPPAP VTL--TETG LGAGIFFAI LVTGAVA-L AMTSYFRNQ RTTG--FOE ESEEDINVA  
CAB61358 924 LIITFS--QD PLQPTETRFV DGRAILQWDI FASNGIILHII SRPLKAPPAP VTL--TETG LGAGIFFAI LVTGAVA-L AMTSYFRNQ RTTG--FOE ESEEDINVA  
AAF82398 752 LIITFS--QD PLQPTETRFV DGRAILQWDI FASNGIILHII SRPLKAPPAP VTL--TETG LGAGIFFAI LVTGAVA-L AMTSYFRNQ RTTG--FOE ESEEDINVA  
CAB61827 2416 IIISDAGPDNS SWAPVAPGTV VVSRIIWDI MAFNGIIHAL ASPLIAPPAP QAVIAPAPP VAGV--GAV LAAGALLGLV AGAIYLRARG KPTGFGFSAF QAEADDADDF  
BAA13377 2059 IIISDAGPDNS SWAPVAPGTV VVSRIIWDI MAFNGIIHAL ASPLIAPPAP QAVIAPAPP VAGV--GAV LAAGALLGLV AGAIYLRARG KPTGFGFSAF QAEADDADDF

17SHARE 1370 LASSSP-RIS QTICMRPQRR HQSPPPVTPS QTL ENRIWRT AT IWGHCQPD MRSQATTWT VPR  
BAB15793 1147 LGKQQPENIS NPLY-ESTTS APPPEPSYDPF TDS EER---- QLEGNDL LRTL  
CAB61358 1024 LGKQQPENIS NPLY-ESTTS APPPEPSYDPF TDS EER---- QLEGNDL LRTL  
AAF82398 852 LGKQQPENIS NPLY-ESTTS APPPEPSYDPF TDS EER---- QLEGNDL LRTL  
CAB61827 2524 SPWQ-EGTN- PTLVSVPNPV FGSDTCEPF DD---- SLEEDFPD TQRLTVK--  
BAA13377 2166 SPWQ-EGTN- PTLVSVPNPV FGSDTCEPF DD---- SLEEDFPD TQRLTVK--

Serial No.:

09/842,930

Title:

HYALURONAN RECEPTOR FOR ENDOCYTOSIS

Inventor:

Paul H. Weigel et al.

Group: 1647

Filed:

April 25, 2001

Agent:

Kathryn L. Hester, Ph.D.

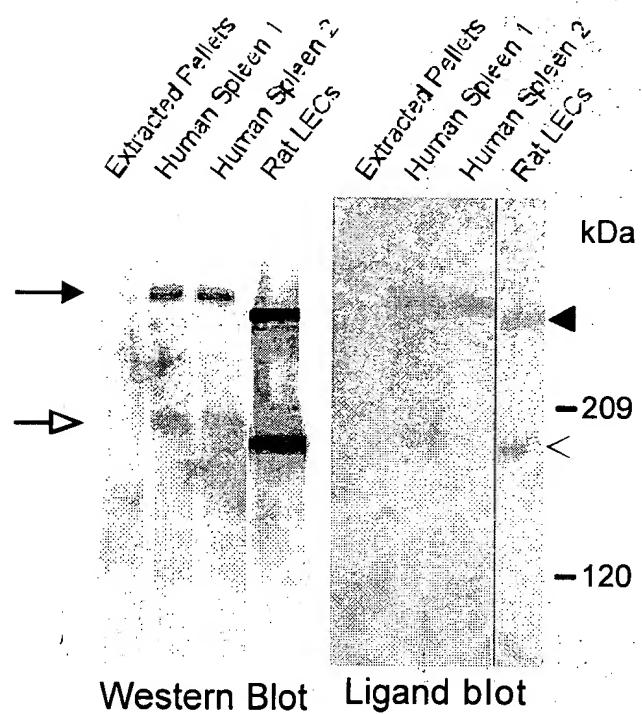
Examiner: L. Spector

Docket No.

5820.603

SHEET 32 OF 42

FORMAL DRAWINGS

**Figure 29**

U.S. Patent Application

Serial No.: 09/842,930

Title: HYALURONAN RECEPTOR FOR ENDOCYTOSIS

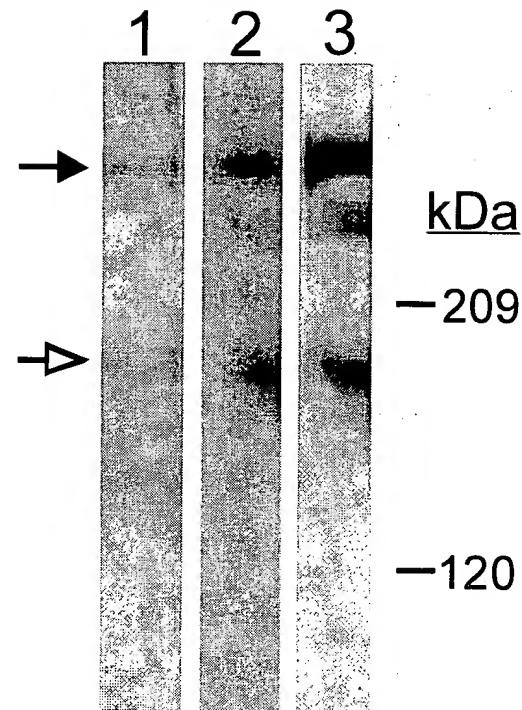
Inventor: Paul H. Weigel et al. Group: 1647

Filed: April 25, 2001

Agent: Kathryn L. Hester, Ph.D. Examiner: L. Spector

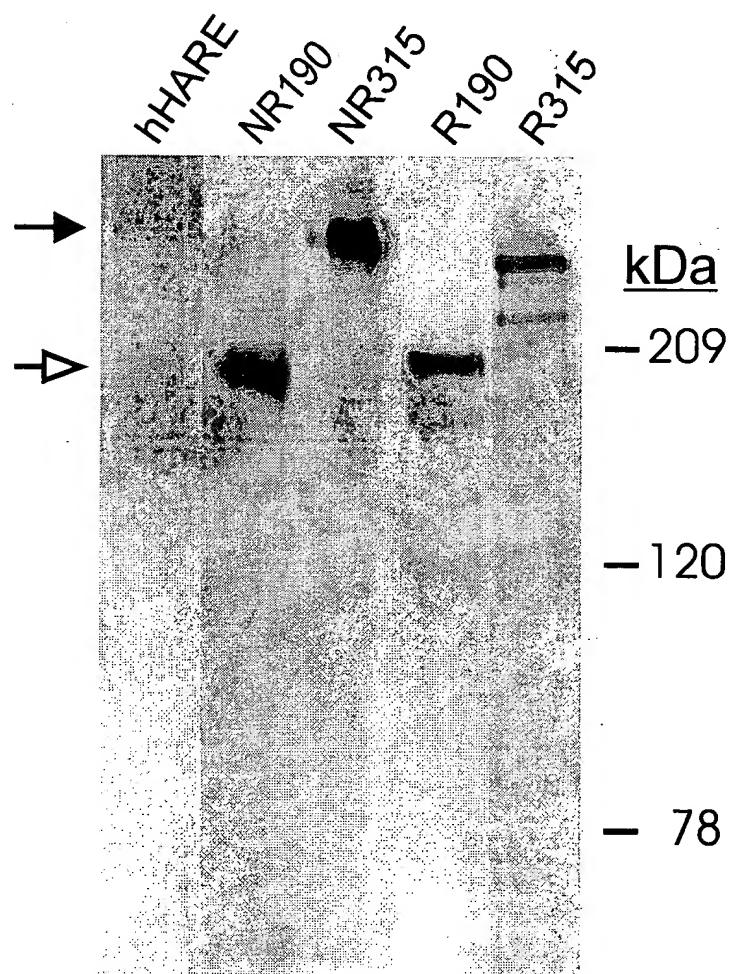
Docket No. 5820.603

SHEET 33 OF 42 FORMAL DRAWINGS

**Figure 3 0**



# Figure 31



EXPRESS MAIL NO.: EV373446295US DATE DEPOSITED: 11/17/2004

US. Patent Application

Serial No.: 09/842,930

Title:

HYALURONAN RECEPTOR FOR ENDOCYTOSIS

Inventor:

Paul H. Weigel et al.

Group: 1647

Filed:

April 25, 2001

Agent:

Kathryn L. Hester, Ph.D.

Examiner: L. Spector

Docket No.

5820.603

SHEET 35 OF 42 FORMAL DRAWINGS

Figure 3 2



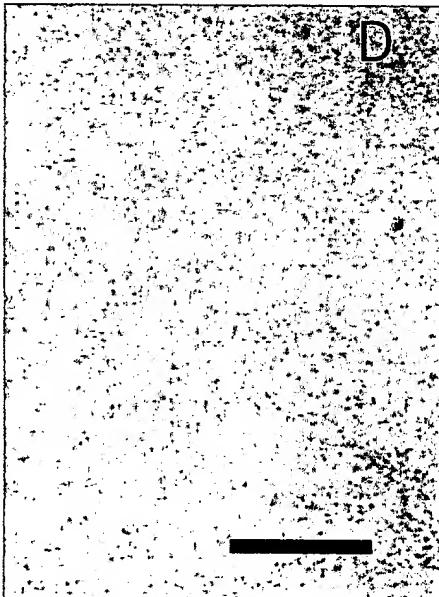
A



B



C



D



US Patent Application

Serial No.: 09/842,930  
 Title: HYALURONAN RECEPTOR FOR ENDOCYTOSIS  
 Inventor: Paul H. Weigel et al. Group: 1647  
 Filed: April 25, 2001  
 Agent: Kathryn L. Hester, Ph.D.  
 Docket No. 5820.603  
 Examiner: L Spector

SHEET 37 OF 42

## FORMAL DRAWINGS

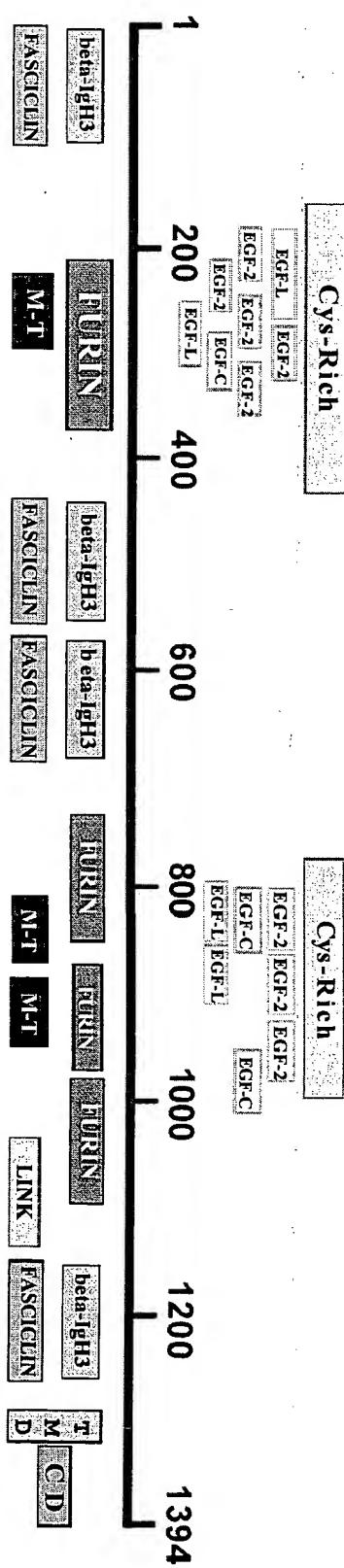


Figure 34

Title: HYALURONAN RECEPTOR FOR ENDOCYTOSIS  
Inventor: Paul H. Wigigel et al.  
Filed: April 12, 2001  
Agent: Kathryn L. Hester, Ph.D.  
Docket No.: 5820.603

Group: 1647  
Examiner: L. Spector

### **Figure 2b**

Serial No.:

09/842,930

Title:

HYALURONAN RECEPTOR FOR ENDOCYTOSIS

Inventor:

Paul H. Weigel et al.

Group: 1647

Filed:

April 25, 2001

Agent:

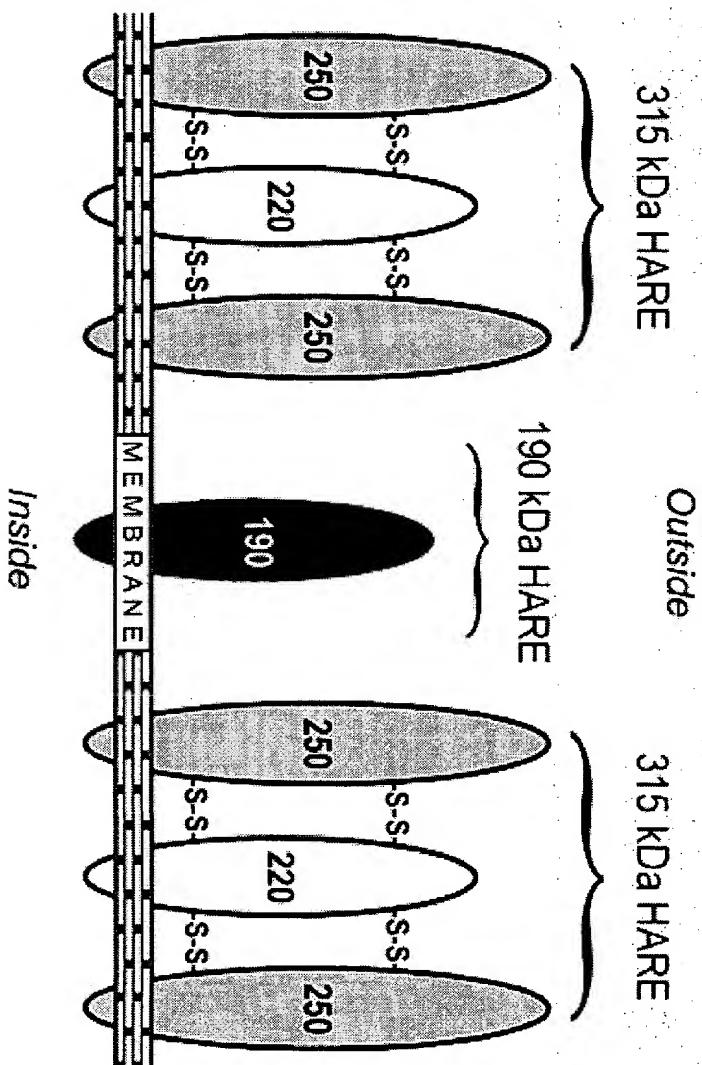
Kathryn L. Hester, Ph.D.

Examiner: L. Spector

Docket No.

5820.603

SHEET 39 OF 42 FORMAL DRAWINGS



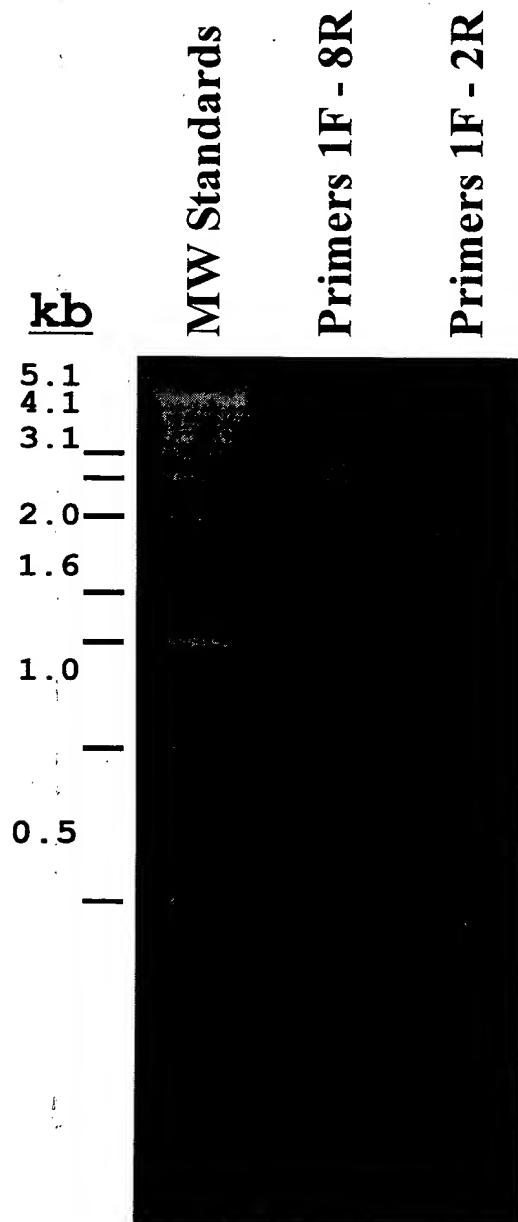
**Figure 36**





# Figure 37

Amplification of the 1394 amino acid HARE  
Open Reading Frame from a human lymph  
node cDNA Library

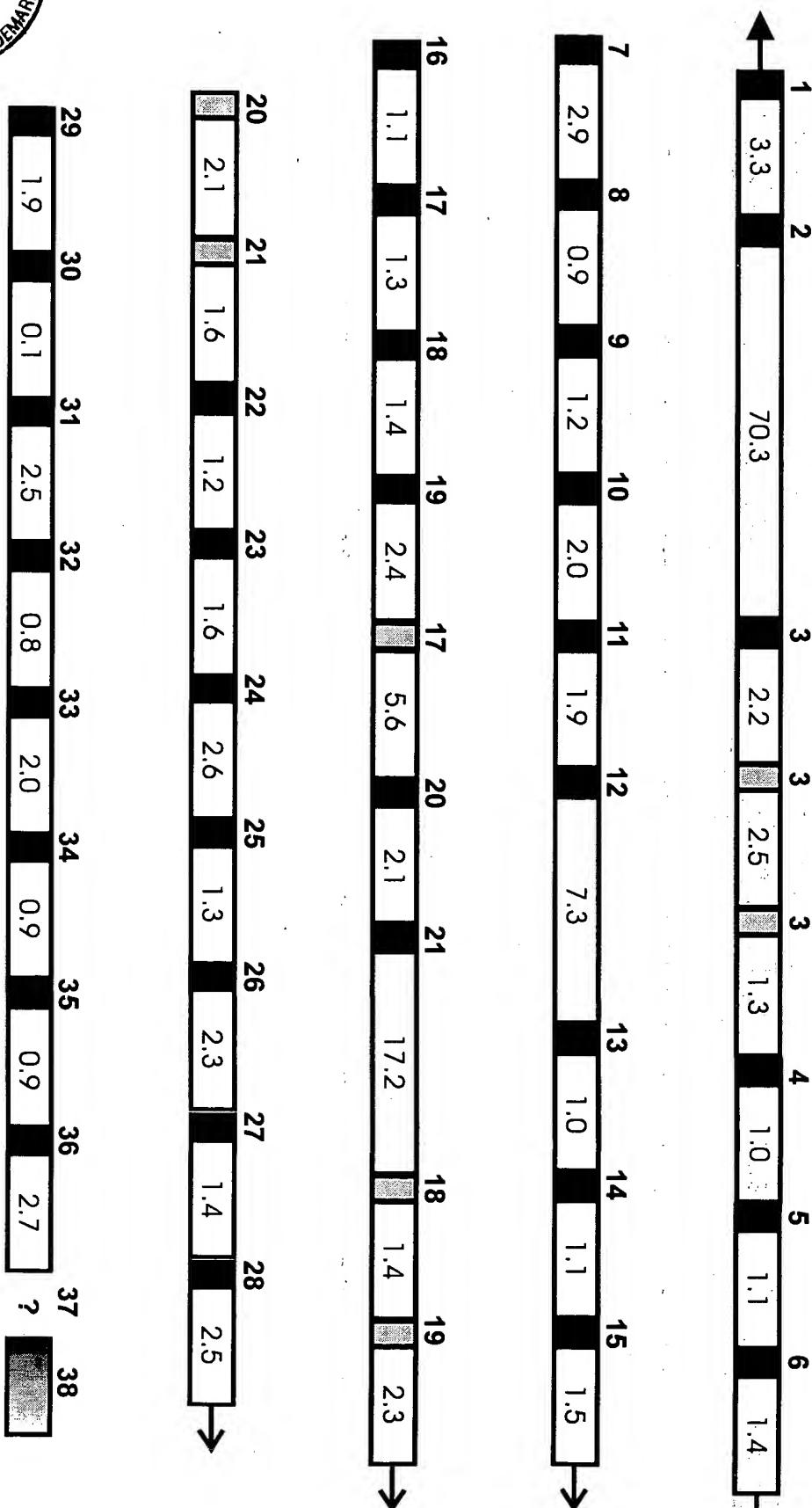


EXPRESS MAIL NO.: EV37344625US   DATE DEPOSITED: 11/17/2004  
US. Patent Application  
Serial No.: 09/842,930  
Title: HYALURONAN RECEPTOR FOR ENDOCYTOSIS  
Inventor: Paul H. Weigel et al. Group: 1647  
Filed: April 23, 2001  
Agent: Kathryn L. Hester, Ph.D.  
Docket No. 5820.603 Examiner: L. Spector  
**SHEET 40 OF 42**  
**FORMAL DRAWINGS**

EXPRESS MAIL NO.: EV373446295US DATE DEPOSITED: 11/17/2004  
 U.S. Patent Application Serial No.: 09/842,930  
 Title: HYALURONAN RECEPTOR FOR ENDOCYTOSIS  
 Inventor: Paul H. Wigle et al. Group: 1647  
 Filed: April 25, 2001  
 Agent: Kathryn L. Hester, Ph.D.  
 Docket No. 5820.603 Examiner: L. Spector  
**SHEET 41 OF 42 FORMAL DRAWINGS**

# Figure 38

Schematic Organization of the Human HARE Gene on Chromosome 12  
(encoding 1357 of the 1394 amino acids disclosed here)



EXPRESS MAIL NO.: EV373446295US DATE DEPOSITED: 11/17/2004  
US. Patent Application  
Serial No.: 09/842,930  
Title: HYALURONAN RECEPTOR FOR ENDOCYTOSIS  
Inventor: Paul H. Weigel et al. Group: 1647  
Filed: April 25, 2001  
Agent: Kathryn L. Hester, Ph.D.  
Docket No. 5820.603  
Examiner: L. Spector

SHEET 42 OF 42 FORMAL DRAWINGS

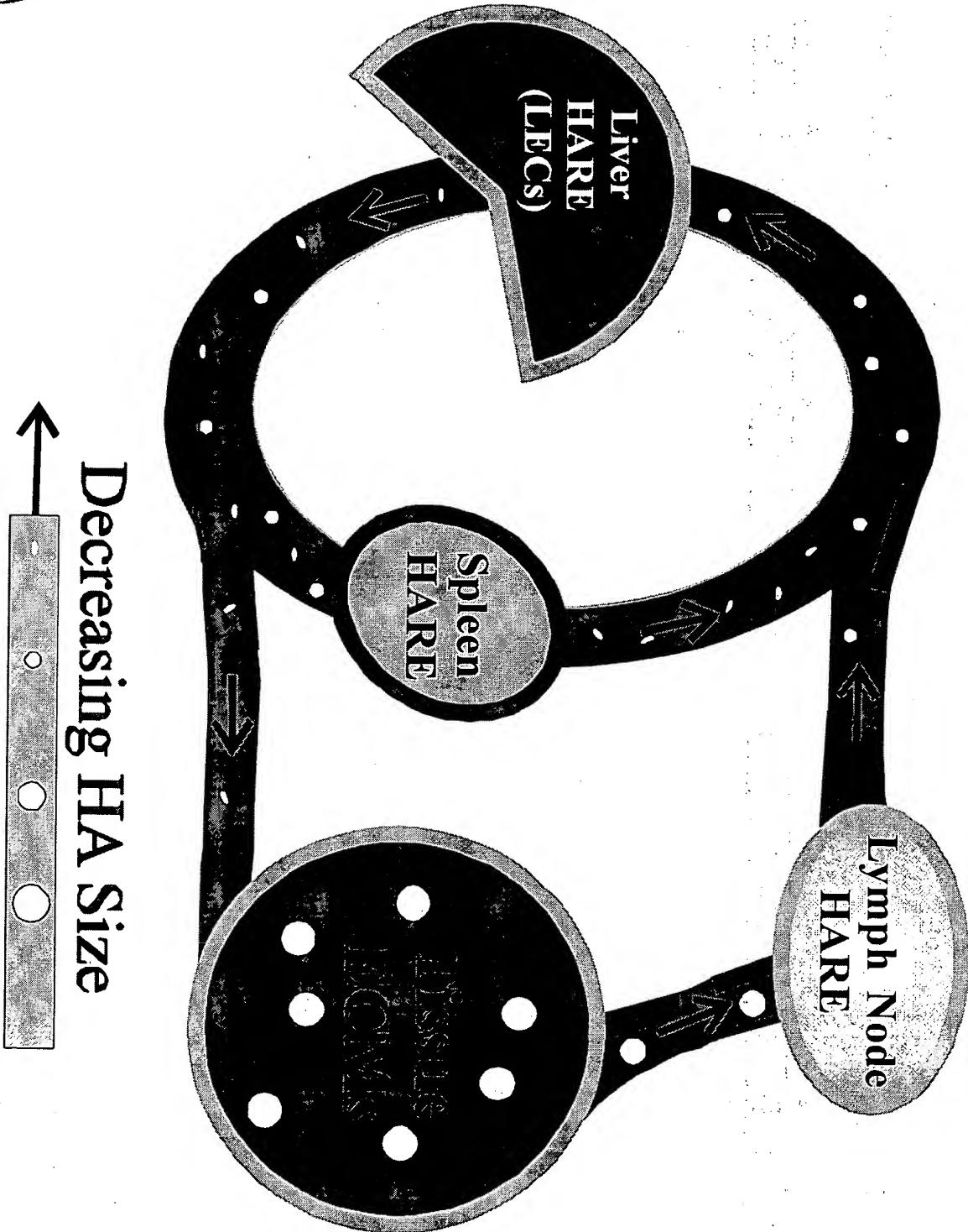


Figure 3 9

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